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V A L U E   A N D   P R I C E :

A Critical Analysis of the "Transformation Problem"

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INDEX

To Professor Dr. J. J. Posadas and to the other members of the Faculty of the University of Buenos Aires.

To the friends and family who have helped me in the preparation of this work.

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To my parents,  
JULIO GOICOECHEA POSADAS  
and  
GUADALUPE MORENO DE GOICOECHEA



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## STATUTORY STATEMENT

This thesis has been composed by myself and the work is my own.\*

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\* In compliance with Edinburgh University (Postgraduate study) Regulation "2.4.15 Every Candidate for the Ph D or the M Phil, LL M or M Litt must incorporate in his thesis a signed declaration (a) that the thesis has been composed by himself, and (b) either that the work is his own, or, if he has been a member of a research group, that he has made a substantial contribution to the work, such contribution being clearly indicated."

# C O N T E N T S

## PROLOGUE

viii

## P A R T I

### A DUALITY OF VALUE:

<u>ABSOLUTE VALUE AND VALUE -MERELY THE INDEX</u>	I
---	---

CHAPTER I. <u>THE MULTIPLICITY OF VALUE</u>	I
---	---

1. Introduction	I
2. A dual meaning of value	I
3. Commodities are replaced by "goods"	13
4. Value is not an exchange relationship	14
5. Value is made identical to prices	30

A. SUPPLEMENTARY NOTES	41
------------------------	----

1. The "good": "absolute value" proportional to value -"the index"	41
a. Proudhon and Dühring	41
b. Incogitancy of "absolute value"; indeterminacy of value -an "index"	43
c. Proportional dualism in Proudhon and Walras	44
2. The commodity: use-value and value (substance of value, extent of value)	49
a. Its contradistinction with the "good"	50
aa. The Theorem of General Economic Equilibrium	58
aaa. A corrected restatement	58
ab. Duality, ethics and money	59
ac. The Theorem of Maximum Utility; "absolute value", a proven imagery	62
ad. A relentless static analysis	63
ae. Proudhon: a synthesis of Walras and von Bortkiewicz	64
3. Extent of value	73
a. David Ricardo: necessary labour v. isolated labour	73
b. Adam Smith: value and its source confused	78
c. Simple and compound labour	79
4. The fetishism of the commodity in von Bortkiewicz and Walras	92

CHAPTER II. <u>THE VALUE OF LABOUR IS THE MEASURE OF VALUE</u>	97
--	----

1. Its reference to value	97
2. Its reference to price	102

CHAPTER III. <u>THE VALUE OF WAGE LABOUR IS THE MEASURE OF VALUE</u>	I07
I. Wages determine prices	I07
CHAPTER IV. <u>AN ASSORTMENT OF VALUE</u>	II5

P A R T II

VALUE-CALCULATION AND PRICE-CALCULATION:

THE ART OF DOUBLE ACCOUNTING II7

CHAPTER V. <u>VALUE-CALCULATION</u>	I24
I. Non-existence of constant capital	I25
2. Value is the measure of value	I34
3. The composition of value is resolved into its decomposition	I36
4. Surplus is a proportional and reciprocal percentage upon wages	I39
5. The fading of a surplus rate	I43
6. Two standards of account; no measure of value	I55
7. The system as a whole	I59
a. An implicit blueprint	I60

CHAPTER VI. <u>PRICE-CALCULATION</u>	I62
I. Non-existence of constant capital	I64
a. Fixed capital used up: depreciation is appreciation	I72
b. The decline of fixed and circulating constant capital	I79
2. Price is the measure of price	I83
3. The price of commodities is regulated by wages	I87
4. Wages are a direct and not a direct determinant of prices	I9I
5. A rate of profit proves unyielding	I94
6. Two standards for accounting prices	200
7. A preposterous measure of value and of price	20I
8. The system in its entirety	2IO
a. An implicit blueprint	2I3

P A R T III

FABRICATION OF THE "TRANSFORMATION PROBLEM":

A DUALITY OF VALUE AND THE ART OF DOUBLE ACCOUNTING 2I6

CHAPTER VII. <u>INTRODUCTORY INCOHERENCIES</u>	2I6
I. A circular itineration between two distinct principles	2I6
2. To keep separate two distinct principles is to recalculate one into the other	2I7
3. The absence of any confusion becomes in fact a confusion	22I

4. The quantitative incongruity as a whole is to be a necessary permissiveness	222
5. The transformation of value into price is banned	224
CHAPTER VIII. <u>ALL LABOUR MUST LEAVE A SURPLUS</u>	225
1. An apocryphal reproduction	225
2. The dawn and twilight of direct labour	236
CHAPTER IX. <u>FROM/INTO THREE DEPARTMENTS OF CONSUMPTION</u>	244
1. A bucolic parody	244
2. <u>Le Petit Trianon</u>	253
3. The supposed Labour Fund	259
CHAPTER X. <u>PROCRUSTES' LABOURS LOST</u>	273
1. An attempt to barter away harmonies	273
2. Proportionality by abduction	278
3. Preposterous search for an ambiguous strut: a postil	296
EPILOGUE	299

## A P P E N D I X

### THE THREE EQUATIONS OF AN ABSOLUTE REALM

I. A restored estate of <u>Comte Destutt de Tracy</u>	301
BIBLIOGRAPHIC INDEX	322



## P R O L O G U E

When looking through the increasing volume of economic literature, our attention is at once arrested by the argument revolving on

"The quantitative incongruity of value and price (more precisely: price of production)", 1/  
while asserting that

"[T]he procedure employed by Marx for the transformation of values into prices is erroneous". 2/  
This argument is better known as the "Transformation Problem," 3/  
under which term it is currently identified and predicated. 4/

Paradoxically, while Marx's procedure has been declared refuted time after time, it nevertheless continues to be refuted at the margin, as it were. In consequence, the frontier of criticism has to be expanded and increased continually, as most often the dismissal of Marx appears to be dexterously followed, notwithstanding, by a peculiar restoration in the form of a new solution. In other words, the "Problem" seems to be so intrinsically fertile and well retributed, that its subscribers proper invariably come out afresh with a special solution in the aftermath of the above averment.

Within the distinguished constellation of writers who have devoted themselves to the "Transformation Problem" at one stage or another, I am pre-eminently directing my attention to Ladislaus von Bortkiewicz. He has the merit of being the first to advance this argument against Marx in a systematic manner in his article "Value [calculation] and Price [calculation] in the Marxian

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1 Von Bortkiewicz, 1952, p. 5.

2 Von Bortkiewicz, 1952, p. 8.

3 For instance, see Sweezy (1946), Winternitz (1948), May (1948), Dobb (1955), Samuelson (1957), Seton (1957), Brody (1970), Samuelson (1971), Medio (1972), Morishima (1973), Koshimura (1975), Abraham-Frois & Berrebi (1976), Gerstein (1976), Napoleoni (1976), Nuti (1977), Pasinetti (1977), Shaikh (1977), Steedman (1977), Morishima & Catephores (1978), Roncaglia (1978) etcetera, etcetera.

4 By referring to this "Problem" in its quantitative expression, I am concentrating mainly on criticisms and objections which take expression in figures.

System," <sup>5/</sup>; subsequently he resorts to a deliverance "On the Correction of Marx's Fundamental Theoretical Construction in the Third Volume of 'Capital'," <sup>6/</sup>. It is with both articles that I am mainly concerned here.

Although the claimed error above is formally advanced against Marx -it is in this context that I will analyse it here-, it would not be harmful to put forward a few, brief remarks first to see whether this argument is entirely new; and whether it was first directed against one German author of the last century who "lapsed" into classical political economy. Subsequently, I will look at some examples in connexion with the introduction of the "Problem" nowadays.

In Ricardo's Principles we find that he is aware that between the value of commodities and their prices of production,<sup>7/</sup> there is a difference <sup>8/</sup>. But instead of examining why they are different, and how they differ, he erroneously proceeds to treat them as if they were identical. His objectors seized this opportunity to charge Ricardo with ambiguously confusing what the commodity costs with what its value is, while he attempts to refute such imputation. For instance,

"Mr. Malthus appears to think that it is a part of my doctrine that the cost and value of a thing [should read: a commodity] should be the same; it is, if he means by cost, 'cost of production' including profits [i.e., price of production]."

5 1952. The original title of this article, "Wertrechnung und Preisrechnung im Marxschen System," undergoes a puzzling sublimation, as it is invariably translated as "Value and Price in the Marxian System". Leaving ostensible mistranslation aside, it must not be overlooked that this article constitutes the first work which claims to present a mathematical exposition of Marx.

6 1949.

7 Let us remember that for Ricardo, "The value of a commodity... depends on the relative quantity of labour which is necessary for its production, and not on the greater or less compensation which is paid for that labour". (1951a, p. 11)

Price of production, also known as cost of production, comprises, in him, profits determined by a presupposed profit rate, plus advanced capital.

8 For instance, he postulates that "The principle that the quantity of labour bestowed on the production of commodities regulates their relative value, /is/ considerably modified by the employment of machinery and other fixed and durable capital". (1951a, p. 30)

In other words, that value is modified as commodities sell at their price of production (yielding profits in proportion to capital outlay); regardless of the quantity of actual labour employed in them.

In the above passage, this is what he does not mean, and therefore he has not clearly understood me."  
(Ricardo, 1951a, p. 47 n.)

In this respect, what Malthus did understand -as quoted by Ricardo- is that

"We have the power indeed, arbitrarily, to call labour which has been employed upon a commodity its real value, but in so doing, we use words in a different sense from that in which they are customarily used; we confound at once the very important distinction between cost and value; and render it almost impossible to explain with clearness the main stimulus to the production of wealth [meaning profits], which in fact depends upon this distinction." (1951a, p. 47 n.)

While Ricardo has erroneously identified price of production (i.e. cost of production) with the value of the commodities, Malthus charges him with confusing the production costs of the commodity with its value. Therefore, Malthus does not distinguish at all between price of production, and value of commodities.

Further, it is Malthus himself who does not even differentiate the labour time paid by the capitalist to the wage labourer, from the amount of labour time embodied in a commodity. While attacking Ricardo, he makes "the very important distinction between cost and value";. In speaking on his own behalf, he has the power to confuse them explicitly; as stressed by Ricardo in the Notes he wrote on him:

"(44) p. 131. [The sacrifice of toil and labour made in the production of a commodity; that is its cost, or more properly speaking a portion of its cost] Malthus/

Mr. M. as I have said before I misunderstands me -I do not say a portion of its cost measures its exchangeable value- but I say its whole value will be in proportion to a portion of its cost, and I do not say this without allowing for modifications and exceptions -though I consider them of no great magnitude.

[1 Above, p. 34 [Ed.] (1951b, pp. 100, 101)

Leaving aside Malthus' harmonization of the cost of production and a portion of it -depending on the propriety of his ductile language, one of the main bequests Ricardo left to posterity was his inability to explain, let alone investigate the entwine of money in which he expresses necessary labour, with the quantity of labour bestowed in the commodities. Without this nexus, commodity exchange and in particular the exchange of capital with labour, opens the door to the conscious or accidental confusion of which Malthus gives overt witness. Ricardo also failed to explain, in spite of renewed



attempts, how commodities can be realized as products of capitals -yielding proportional profits- on the basis of his law of value, viz. exchanged -nevertheless- at their values. This failure gave further "command" for Malthus to declare Ricardo's law revoked:

"Mr. Ricardo, indeed, himself admits of considerable exceptions to his rule; but if we examine the classes which come under his exceptions, that is, where the quantities of fixed capital employed are different and of different degrees of duration, and where the periods of the returns of the circulating capital employed are not the same, we shall find that they are so numerous, that the rule may be considered as the exception and the exceptions the rule." (Malthus, 1827, p. 27)

Such a resolute rebuke was enhanced by the fact that Ricardo himself attempted simply to hedge round his allowance, i.e. "modifications and exceptions", to the extreme of erroneously assuming coincidence between value and cost of production. We have seen that such identification was immediately seized on by Malthus, who chose to ignore any difference between what the commodity costs and what its value is, and furthermore, denied the validity of value as the basis at which commodities are sold.

After this brief digression, let us turn to some studies of Marx, by way of example, which acknowledge this "Problem" and which would provide introductory material more familiar -partly because more recent- than von Bortkiewicz's two articles. The authors of the studies set out below are connected with the current popularization of the "Problem".

In an "Introduction" to A Contribution to the Critique of Political Economy,<sup>9/</sup> written by Maurice Dobb, a recent Fellow of Trinity College at Cambridge, we read that

"Parts I and II of Volume III [of Marx's Capital], as we know, were occupied with demonstrating how and why 'prices of production' diverge from values -diverging in a systematic and demonstrable way. Although this demonstration as he left it was incomplete, we now know as a result of subsequent discussion and analysis of the so-called 'Transformation Problem' that, when the essential relations are expressed as a system of simultaneous equations, these 'prices of production' can be derived from values and from the essential conditions of production in the 'value situation' (given, i.e., the rate of exploitation or of surplus value)." <sup>10/</sup>

It is not until the next paragraph that Mr. Dobb actually states

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9 (Dobb, 1970, pp. 10 - 16)  
10 (Dobb, 1970, pp. 11 - 12)

what the "Transformation Problem" is.

"The problem for Marx was not to prove the existence of surplus value and exploitation by means of a theory of value: it was, indeed, to reconcile the existence of surplus value with the reign of market competition and of exchange of value equivalents." (1970, p. 12)

Let us start from the last sentence of this quotation. Mr. Dobb is presupposing the existence of two realms: "the reign of market competition and [the reign] of exchange of value equivalents." Further, he claims that Marx was trying to reconcile the existence of surplus value, a constituent element of "a theory of value", with "the reign of market competition", i.e. prices of production - a reign presumably including already an average profit rate. He implies that Marx failed in his task of reconciliation in spite of being engaged - "with demonstrating ... in a ... demonstrable way ... this demonstration". He concludes that Marx left his analysis "incomplete". Hence, the "Transformation Problem" - which Mr. Dobb acknowledges as a problem for Marx, while refraining from referring the reader to any authority whatsoever. This does not stop this Fellow <sup>11/</sup> from implying a source of his comments that is not Capital.<sup>12/</sup> These subordinated statements of Maurice Dobb are remarkably similar, if not verbatim of those of Paul M. Sweezy.<sup>13/</sup>

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11 Not the first one to echo attacks on Marx (vide Engels, 1918).

12. Mr. Dobb seemed to have known so well his own literature, that he declined to quote himself in this respect, while elsewhere he has fulsome praise for Sweezy, who by-the-by brought von Bortkiewicz home:

"In the present volume [The Theory of Capitalist Development] students of Marxism will find of special interest what strikes me as being the most understanding and illuminating interpretation of Marx's theory of value that has appeared in recent times, and his [Sweezy's] discussion (and his own solution) of the so-called 'transformation problem' (along the lines of Bortkiewicz's critique) will be new to English students". (1946, p. v)

See also Dobb (1964), in his Introduction to an Italian edition of Capital, where he acknowledges that

"It was the merit of Bortkiewicz in the first decade of the present century to have shown that such a solution [to the 'Transformation Problem'] was indeed possible". (p. 256)

13 In his turn, Sweezy (1946, p. 123) states:

"With the help of Bortkiewicz's method we have shown that a system of price calculation can be derived from a system of value calculation. This is the problem in which Marx was really interested. He believed he could solve it by using an average rate of profit calculated directly from value magnitudes. This was an error, but it was an error which pales into insignificance when compared with his

Dobb and Sweezy seem to be reflecting von Bortkiewicz, while Marx appears to have been left in the background to avoid embarrassment. Were these statements of Mr. Dobb true, they would be very damaging to Marx. Once it is claimed that prices of production do not follow from -or are incompatible with- value equivalents at which commodities exchange; that profits diverge as a whole from total surplus value, the value of commodities becomes meaningless and the price of commodities is discovered to be without determination. It would also necessarily follow that the value of commodities would not determine the general nature of profits. Dobb proceeds, next, to quote Marx in this respect, which in the light of the above charge, appears to be a self-indicting quotation by the very author of Capital.

"As he [Marx] himself expressed it:

'To explain [ , therefore, ] the general nature of profits, you must start from the theorem that on an average, commodities are sold at their real values, and that profits are derived from selling them at their values... [ , that is, in proportion to the quantity of labour realised in them. ] If you cannot explain profits upon this supposition, you cannot explain it at all.'\*

\* Value, Price and Profit, ed. Eleanor Marx Aveling (London, 1898), pp. 53, 54 (italics in the original)."  
(Dobb, 1970, pp. 12, 13)

We can realize that Maurice Dobb, editor and introducer of Marx's A Contribution to the Critique of Political Economy (interestingly enough issued by Progress Publishers in Moscow), has obliquely put forward these claims as flaws in Marx's arguments that concern fundamental economic relations. This would, therefore, cast doubts as to the validity of Capital itself constituting A Critique of Political Economy.

In a foreword to a French edition of Capital, M. Louis Althusser tried to anticipate eventual problems of possible incompatibility between value and price as a whole, as he disposes of the total surplus value by turning it into a puzzling unquantifiable unknown, which, in his words, can be counted by nobody:

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profoundly original achievement in posing the problem correctly. For, by this accomplishment, Marx set the stage for a final vindication of the labour theory of value, the solid foundation of his whole theoretical structure. With these sort of sympathizers, Marx hardly needed any opponents, not even of this stature.



"Attention : l'abstraction scientifique n'est pas du tout 'abstraite', tout au contraire. Exemple : lorsque Marx parle du capital social total, personne ne peut le 'toucher avec les mains', lorsque Marx parle de la 'plus-value totale', personne ne peut la toucher avec les mains, ni la compter : pourtant ces deux concepts abstraits désignent des réalités effectivement existantes." 14/

Quite apart from M. Althusser's sensual perceptions on Marx -which we can safely obliterate, he is further intimating that there are two "effectively existing realities": total social capital alongside with total surplus value. The latter is so elusive for M. Althusser that he declares that it is beyond measurement, far less annumeration, as he reckons that "nobody can ... count it". This does not stop him from stating that

"La théorie de la 'valeur-travail' n'est pas le seul point qui fasse difficulté dans le Capital livre I. Il faut bien entendu mentionner la théorie de la plus-value, bête noire des économistes et idéologues bourgeois, qui lui reprochent d'être 'métaphysique', 'aristotélicienne', 'inopératoire' etc." 15/

While M. Althusser does not hesitate to scorn bourgeois economists and/or bourgeois ideologues who render surplus value inoperative et cetera, in practice he finds explanatory means of counting himself effectively among their number by rendering surplus value unaccountable as a whole. After having rendered this personal description "bel et bien," if Louis Althusser's observations on Marx were true, Capital ought then to be harmonized with bourgeois economics -if it were not already "part and parcel" of it. Meanwhile, most of its title, i.e. Critique de l'Économie Politique, would lose raison d'être and ought to have been deleted -as has happened in the edition Althusser heralds with accomplished scholasticism 16/.

Another example is in Samuelson's Economics, which could

14 Althusser, 1969, p. 10. ("Attention: scientific abstraction is not in the least 'abstract', on the contrary. For example: when Marx speaks of total social capital, nobody can 'touch it with their hands', when Marx speaks of the 'total surplus value', nobody can touch it with the hands, nor count it: however, these two abstract concepts designate effectively existing realities.")

15 Althusser, 1969, p. 19. ("The 'labour-value' theory is not the only point that renders difficulty in Capital Vol. I. It is of course necessary to mention the theory of surplus-value, bête noire of bourgeois economists and ideologues, who condemn it as being 'metaphysical', 'Aristotelian', 'inoperative' etc.")

16 Vide Marx, 1969b.

be claimed to be as the current edition of Jean Baptiste Say's Catéchisme d'Économie Politique,<sup>17/</sup> suitably revised and enlarged. In it, it is observed that

"Since this is an appendix that attempts to present Marx's concepts sympathetically, leaving to advanced books pro-and-con evaluations, let us simply provide one line of defense and exposition.

1. Surplus value provides a simpler way to explain exploitation to beginners. It focuses on human labor as being directly exploited. (And, note, its algebra is much simpler for nineteenth-century readers -since solving for  $\pi = 1.0$  can be shown to be equivalent to solving for the root of a quadratic polynomial).

2. Marxians claim that the microeconomic parceling out of surpluses as between industries, around a determined average level, may indeed be compelled by ruthless competition to follow pre-Capital bourgeois rules of equal profit (equal  $\pi$  as against equal industrial m's of surplus value). But that average level of profit exploitation, and how it grows under capitalism, Marxians believe can be most simply determined macroeconomically by the concept of surplus-value markups on exploited direct labor.

What to think? If we agree with the first point, that surplus value is an easier approximation to explain, then perhaps we need not worry if the second point of defense turns out to be deemed unnecessary by a jury a hundred years from now made up of Marxians and non-Marxians alike." <sup>18/</sup>

Incidentally, to "explain" exploitation, i.e. "human labor as being directly exploited" by means of surplus value, amounts to explaining surplus value by means of "human labor as being directly exploited." Professor Samuelson simply confirms here his tautological point as he discovers, circularly, that "It [surplus value, viz. exploitation] focuses on human labor as being directly exploited." However, were surplus value what Professor Samuelson claims here, it would imply that value has to be a "constituent" element of human labour, out of which surplus value ought to be "deducted," moreover "directly [sic"]". Ergo, a "deduction theory." However, Marx has made clear -in spite of Maurice Dobb-, that it is commodities which are to be sold, on average, at their value. So it is difficult to understand how Professor Samuelson can explain surplus value with a "deduction theory" which amounts to unequal exchange, i.e. by "surplus-value markups"(sic). Further, he presupposed a "determined average level [sic]" of "surplus-value markups"(sic), as an antecedent -or

<sup>17</sup> As its title displays, this pamphlet -the first in its class-intends to present a catalogue of dogmas as the rudiments of political economy.

<sup>18</sup> Samuelson, 1976, p. 861.

consequent- of "average level of profit exploitation"(sic). Quite aside from the contradiction in terms, Professor Samuelson is -at best-oblivious, because according to Marx, profits are to be derived from selling commodities at their values, as quoted above.<sup>19/</sup> As for his line of defence, apart from circulating from one tautology to another, he actually invites the reader to cover up the quantitative relation between "surplus value markups"(sic) and the "average level of profit exploitation"(sic), because "perhaps"(sic) its exposure might "turn out to be deemed unnecessary by a jury a hundred years from now"(sic). As for his line of exposition, all of Samuelson's arguments only serve to slip in the assumption of a double set of rates,<sup>20/</sup> naively presented as

"'Explaining' exploitation Which formulation is better?  
'Values' or 'Prices'?" 21/

Let us also note that for Professor Samuelson also there are two reigns -to use Mr. Dobb's hopeful words, or two systems of calculation -to use Paul M. Sweezy's terminology on behalf of von Bortkiewicz, or according to Althusser's strabismus, two Effectively Existing Realities. Unhappily, our distinguished laureate, Samuelson, is following his predecessors regarding values and prices as dual formulations.

Finally, let us turn to a current edition of Capital,

19 By taking an alternative course, Samuelson repeats worn out -albeit familiar- errors, as he finds himself popularizing Sweezy (1946, p. 124), for instance, who claims that

"In the first place, he [von Bortkiewicz] regarded it as conclusive support for the Marxian view that profits constitute a subtraction from the product of labour. In this connection Bortkiewicz substituted the neutral expression 'deduction theory' (Abzugstheorie) for Marx's term 'exploitation theory' (Ausbeutungstheorie)."

But see how well informed are both Sweezy and Samuelson on the subject they write on as von Bortkiewicz associates a Withholding Theory with Ricardo rather than with Marx:

"In other words, much better than Marx's contrary view, does Ricardo's fit into that theory of profit [or value] which regards profit [or value] as a withholding of some produce of labour, i.e. into the 'Withholding Theory' (as I should like to call it instead of 'Exploitation Theory')." (1952, p. 33)

All that von Bortkiewicz is saying here is that a Withholding Theory, as he likes to call it, fits better (but it might not fit well enough) in Ricardo -although Marx contested this tailoring. As we see, it is Sweezy (now seconded by Samuelson), who is explicitly ascribing a Withholding Theory to Marx.

20 "surplus value markups"(sic), and "average level of profit exploitation [sic]".

21 (1976, p. 861)



Introduced by Ernest Mandel. In a bird's eye view, he tallies three-quarters of a century of attacks on the corner-stone of Marx's "system," otherwise known as "his [Marx's] theory of value". We are told, as in reading Althusser above, that the theory attracts bourgeois critics, who as might be expected, "show a sharp class instinct here," viz., at the corner-stone. But we are given assurances that there are no major weaknesses. In fact, Mandel argues that all such criticism rests on a blatant misinterpretation:

"But no contemporary intellectual endeavour has been so obviously based upon a basic misunderstanding as the repeated attacks on the Marxist labour theory of value. 35/

35 The 'classical' attack by Böhm-Bawerk was answered by Hilferding (both are printed together in Böhm-Bawerk, op. cit.)." (Mandel, 1976, p. 38)

In the next page, he provides an eagerly awaited personal interpretation of Marx's endeavours.

"What Marx tried to discover was a hidden key behind price fluctuations, the atoms inside the molecule so to speak. He moved the whole economic analysis to a different and higher level of abstraction. His question was not: how does Sammy run (what movements do his legs and body make while running), but what makes Sammy run." (Mandel, 1976, p. 39)

But while Mandel -like Dobb- abstains from stating directly if Marx was to be regarded successful in his search for the "hidden key", the point is made by roundabout methods. In point of fact,

"It is true that according to Marx and Engels capitalists do not exchange the commodities they own on the basis of their value, whereas under petty commodity production exchange of commodities is roughly based upon their value. 30/

30 Karl Marx, Capital, Vol. 3, pp. 174-5; Friederich Engels, 'Law of Value and Rate of Profit', ibid. (appendix), p. 876." (Mandel, 1976, p. 31)

So now we know! Commodities are not to be exchanged on the basis of their value. Well, not in capitalism, where their values "do not" constitute a basis for "the exchange [of] the commodities they [the capitalists] own", but "roughly" in petty commodity production, viz.,

"In simple commodity production, [where] capital does not produce surplus-value." (Mandel, 1976, p. 55)

Strangely enough, according to Marx himself, the profits (which the capitalists obtain) are to be explained -if at all- by means of the commodities being sold at their value -as quoted by Dobb above.

Leaving aside Mandel's regression -however rough- to

petty commodity production, leaving aside the puerile references to Sammy, he forgot to inform and enlighten the English reader as to what it is that necessarily dominates prices of production -if anything. Nevertheless, he is attentive enough and resolute enough to send the reader to Volume III of Capital. In particular, to the appendix indicated where the reported quotes from Marx are contained. In such appendix we read precisely that:

"'No economist with any trace of sense has ever concerned himself or will ever want to concern himself with a value which commodities do not sell for and never can sell for (ne possono vendersi mai)....'" 22/

Thus spoke Achille Loria (as quoted by Engels who regarded him as an ordinary charlatan), and Loria continues to speak for Mandel as follows:

"'In asserting that the value for which commodities never sell is proportional to the labour they contain, what does Marx do except repeat in an inverted form the thesis of the orthodox economists, that the value for which commodities sell is not proportional to the labour expended on them?...'" 23/

Ernest Mandel only attempts to answer these objectors of Marx and ends up joining their ranks. These objections, as Mandel says, "occur again and again in discussion of Marx's economic theory." 24/  
For example:

"In addition we find in Marx the perverse desire to project logical contradictions onto the objects themselves, in the manner of Hegel. The determination of prices, as it takes place in the capitalist economy, contradicts the law of value. And why not? The capitalist economic order is filled and permeated with contradictions of all kinds. It would only seem right to Marx to enter one more contradiction into capitalism's account." (von Bortkiewicz, 1906, p. 4; quoted by Rosdolsky, 1977, p. 119 n.)

and in Böhm-Bawerk:

"Value, as Marx defines it, does not appear in the exchange relation as it concerns the objects of capitalist production... For it is self-evident that a theory [labour theory of value] which by its own admission is not in accordance with reality cannot have any significance for the explanation and evaluation of real conditions." (1959, pp. 307, 308)

adding further that

"In order to maintain without obvious contradiction their cherished philosophical principle that labour is the 'true' source

22 (Engels, 1971, p. 891)

23 (Engels, 1971, p. 891)

24 (Mandel, 1976, p. 31)



of value, they [Smith and Ricardo] were obliged to retreat to mythical times and places in which capitalists and landed proprietors did not exist. There they could maintain it without contradiction, for there was nothing to restrain them...

It was to tendencies and views of this kind, which had acquired from Smith and Ricardo a great but not undisputed authority, that Marx became heir, and as an ardent socialist he willingly believed in them." (Böhm-Bawerk, 1949, pp. 78, 79)

As can be seen, in order to heal the unbearable contradiction for the commodities the capitalists own and exchange, Ernest Mandel discovers that they are not to be exchanged on the basis of their value, though that might have happened, roughly, in "petty" or simple commodity production, a long time ago. It looks as if surplus value was, for Mandel, an unexplained embarrassment.

Passing over the humorous asides which Mandel forces upon his submissive audience, it is beyond his capacity to explain the nature of surplus value -and profits- on the basis of value. Unavoidably, he resorts to Samuelson et al., to lead the way via their remarks on unequal exchange. Further, production of value is explained by means of extraction of surplus value out of living labour:

"We see it [capitalist wealth] now also as the result of a gigantic process of value production, of surplus value extraction out of living labour, as a gigantic movement constantly revolutionizing the means of production, the organization of production, the labour process and the producers themselves." (1976, p. 36)

If value is not a constituent element of "living labour", how can the capitalist -not to mention Ernest Mandel- extract surplus value out of it? This, being so obvious for this introducer, apparently requires no explanation. Instead, he longs for the golden age of the "development of rich individualities" <sup>25/</sup> -presumably without a "deduction theory" at all <sup>26/</sup>.

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<sup>25</sup> 1976, p. 37.

<sup>26</sup> However, he is not sure how far-reaching is the "living labour" he depicts as he plainly states that

"It is therefore incorrect to state, as does Blaug, following other academic critics of Marx, that Marx's theory of value is a theory of 'unearned increment' <sup>43/</sup>. It is an appropriation or deduction theory of the capitalist's income, as was the classical labour theory of value.

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<sup>43</sup> Mark Blaug, 'Technical Change and Marxian Economics', Kyklos Vol. 3, 1960, quoted in Horowitz, op. cit., p. 227." (1976, p. 51) It is difficult to understand -for anybody endowed with commonsense-

Apart from the mindful rehabilitation the illustre Achille Loria undergoes, Mandel subscribes to the -by now- customary strabismus. In a nutshell, he is exposing the crude reality of "real wages" and "beyond" -back in Marx:

"Marx had studied the movement of real wages during the trade cycle, and the fact that wages were at their highest level when capital accumulation was progressing at the quickest pace by no means escaped him. 61/ But, once again, he tried to go beyond such evident facts to study the fundamental modifications in value terms which capital accumulation would exercise upon labour.

61 Karl Marx, 'Wages, Price and Profit', in Selected Works in one volume, London, 1970, pp. 220-21." (1976, p. 63)

Obviously, it was outside the limits of Mandel to state in the "Introduction" quoted whether Marx came back, or even whether he even achieved the vaunted travels. This is part, no doubt, of the intimidating assaults of Mandel into "a different and higher level of abstraction", whatever that might mean.

The memorable remarks of Mr. Dobb, the dim insights of M. Althusser and Professor Samuelson's farsighted judgements -three ordinary examples supplemented by Mandel's higher though not different elucidations, led me to undertake an examination of the source of their remarks and the implications that flow from them. In a word, to question at its inception, the "Problem" that they claim -or suggest- is in Marx. It has, therefore, been necessary to return to von Bortkiewicz regardless of the loss of attention which might otherwise have been paid to his followers,

how the capitalists become any richer by their income undergoing any deduction whatsoever, or alternatively by their income being appropriated to any extent. Eager as Mandel is to tone down the merit of his discovery, he is at pains to extend it to a "classical theory of value" -even to include Marx himself. Even if Mandel meant in his neat ambiguity a deduction from the "value which the workers have already produced" (1976, p. 51), he would then be in agreement with Mark Blaug who actually says "unearned income" (1960, p. 227). Mandel has the integrity of misquoting him above, and while by the same token Blaug is tacitly shown to be an upholder of the classical labour theory of value (sic), Mandel undertakes a self-appointment as an academic critic of Marx a few pages later, so as to share the suggestive compliments:

"Once we understand this that profits originate in the process of production, there is no room for any abstinence theory of profit -only for a subtraction one." (1976, p. 62)

As can be seen, Mandel repeats and authenticates his extended views; this time referred to a "theory of profits".

whether "Marxian" or not, an understanding of whom should be available from an understanding of the master.

This work does not intend to present another system or model as an alternative to von Bortkiewicz. However, his modifications of Marx have given me pause to examine von Bortkiewicz's model as a connected whole and in its parts.

Therefore, I am analysing the process by which the overall divergence is posed, rather than confining myself either to a revision of the existing multiple "solutions," or to encumber further such plethora.

As to how I proceed, in the first part of this work I inquire into von Bortkiewicz's dissertation on value, after which -in the second part- I consider separately his systems of calculation derived therefrom. It is in the third and last part where I enter into the "Problem" itself.

Finally, I should insist that it has been unavoidable and indispensable to follow von Bortkiewicz in detail, if I was not to rely on secondary -or even tertiary- sources, in order to expose the differentia specifica between von Bortkiewicz and Marx, which, I must add, has not been a thankless task.

Julio F. Goicoechea Moreno

Edinburgh, April 14, 1979

# P A R T I

## A DUALITY OF VALUE:

### ABSOLUTE VALUE AND VALUE -MERELY THE INDEX

## C H A P T E R I

### THE MULTIPLICITY OF VALUE

#### I. Introduction

Von Bortkiewicz commences his analysis of Marx with an assertion, viz., that there is a quantitative disagreement between value and price of production, or granting an approximate exactness, a quantitative disagreement between value and price constituting a specific characteristic of Marx:

"The quantitative incongruity of value and price (more precisely: price of production) forms a specific characteristic of Marx's theory of the capitalist economy."  
(von Bortkiewicz, 1952, p. 5)

Far from proceeding next to qualify or substantiate his claims on Marx, von Bortkiewicz presents us instead with a theory of value. This, he does

"in order to avoid misunderstandings due to the multiple significance of the concept of value." (von Bortkiewicz, 1952, p.6)

At first glance, he has a sui generis way of proceeding. He pleads to avoid "misunderstandings" by means of providing several understandings. The "multiple significance of the concept of value" looks like a contradiction in terms.

Von Bortkiewicz's observations on value are most helpful, as he would explain to us more precisely how value can have not one but many meanings, multiple meanings according to him. To his explanations, we proceed next.

#### 2. A dual meaning of value

Let us see how von Bortkiewicz regards value, as he continues:



"In this context [of the quantitative incongruity of value and price], value can have no other meaning than that of a magnitude which indicates how many units of the good serving as a measure of value are obtained in exchange for a commodity or for a [quantitative (Mengeneinheit)] unit of this commodity. In this sense, value is merely the index of an exchange relationship and must not be confused with the so-called 'absolute value' of a commodity, which is identical with the quantity of labour employed in its production" (von Bortkiewicz, 1952, p. 5)

In an attempt to validate this dual meaning of value, von Bortkiewicz asserts in a corresponding footnote, that

"Marx himself avoids the term 'absolute value' and instead occasionally uses either 'real value' (e.g. in Theorien über den Mehrwert, Vol. II, Part I, p. 150, footnote), or 'immanent value' (Das Kapital III, p. 147). As a rule, however, Marx uses the word 'value' by itself even when he has absolute value in mind, (e.g. in Das Kapital, I, pp. 6-7)." (von Bortkiewicz, 1952, p. 5 n. 2)

To von Bortkiewicz himself falls the indisputable merit of having found "the so-called 'absolute value'" not in the works of Marx, from which he fails to extract even one example -but instead in what Marx has "in mind" <sup>1/</sup>.

Von Bortkiewicz is asking us to distinguish between value as an "index", and value as an "absolute". Let us follow his advice, as we consider such duality separately.

First, let us try to disentangle "absolute value". He has told us that

"the so-called 'absolute value' of a commodity is identical with the quantity of labour employed in its production".

Therefore, if the "absolute value" of a commodity is identical with the quantity of labour employed in its production, it follows in consequence that the quantity of labour employed in its production, is identical with the "absolute value" of such a commodity, ad infinitum.<sup>2/</sup> The endless emptiness of repetition brings out even more

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1 Let us observe, that the method of proof employed by von Bortkiewicz eschews the provision of demonstration by precisely omitting to demonstrate his assertion. Accordingly, this ethereal statement of the "so-called 'absolute value'" whether "so-called" or not, in Marx, can prove nothing. No scholarly investigation can be based on what Marx (or anybody else) has "in mind".

2 As if the circular character and implications of such statements (definitional identities) were not obvious enough, R.G. Lipsey, for instance, concludes that

"Definitional identities, therefore, tell us nothing about the world. They cannot be the 'basis' of any theory (although they can be very helpful to convey [commonplace] definitions of terms) and they can usually be reduced to the [trivial] form  $y \equiv y$  which, although true [by virtue of our use of words], is hardly enlightening." (1975, p.33)

clearly the emptiness of content.

If we were to follow von Bortkiewicz in an attempt to arrive at some result, we would begin by saying that the "so-called 'absolute value'" of a commodity is determined by the quantity of labour employed in its production, and we would wind up by saying that the quantity of labour employed in its production is determined by the "so-called 'absolute value'". Thus we would move to and fro within a tautology, arriving at no conclusion at all.

Let us attempt to move further trying to apply von Bortkiewicz's definition of "absolute value".

"The value of a good A could then be expressed as a certain number of time units of labour, e.g. as 12 days of labour." (1952, p. 5)

Von Bortkiewicz is claiming that the value of "a good A" can be expressed in units of labour time, say, as 12 days of labour. But then, how do we determine the value of a labour day of say, 12 hours?

"How then is the value, e.g., of a 12 hours' working day to be determined? By the 12 working hours contained in a working day of 12 hours, which is an absurd tautology."  
(Marx, 1918, p. 586)

We are led to this absurd tautology due to von Bortkiewicz's very notion of "absolute value of a commodity, which is identical with the quantity of labour employed in its production". In order to realize the incorrectness of von Bortkiewicz's "absolute value", we must carefully note that

"Since labour produces not only products but also value under certain social conditions, and since value is measured by labour, the latter can no more have a separate weight or heat a separate temperature." (Engels, 1976, p. 405)

That is to say, the value of a commodity cannot have a separate "absolute value" any more than the weight of an object can have a separate weight, viz., kilogrammes and on the other hand, y units of weight as such. No more than the heat of a body can be measured in °F and also in separate units of heat by themselves. Von Bortkiewicz's duality of value suggests even lack of common sense. By the way, it assumes that labour is a commodity.

Nevertheless,

"Value itself is nothing other than the expression of the socially necessary human labour materialized in an object. Labour can therefore have no value. One might as well speak of the value of value, or try to determine it. Herr Dühring dismisses people like Owen, Saint-Simon and Fourier by calling them social alchemists. By his logic-chopping over the value of labour-time, that is, of labour,

he shows that he ranks far beneath the genuine alchemists." (Engels, 1976, p. 256)

What caps von Bortkiewicz? The fact that he does not understand how the quantity of labour materialized in a commodity expresses itself, precisely, in a commodity production regime. To express it in such and such number of labour hours or labour days would lead to a tautology eluding determination,<sup>3/</sup> while the ambiguity of value and "absolute value" is uphold.

What is then, the value of a commodity? Let Engels outline an answer while von Bortkiewicz's duality is disposed of.

"Consequently, when I say that a commodity has a particular value, I say (1) that it is a socially useful product; (2) that it has been produced by a private individual for private account; (3) that, although it is a product of individual labour, it is at the same time and as it were unwittingly and involuntarily, also a product of social labour and, be it noted, of a definite quantity of this labour, established in a social way through exchange; and (4) that I express this quantity not in labour itself, in such and such a number of labour-hours, but in another commodity. If, I therefore, I say that this clock is worth as much as that piece of cloth and each is worth fifty shillings, I say that an equal quantity of social labour is contained in the clock, the cloth and the money. I therefore assert that the social labour time represented in them has been socially measured and found to be equal. But not directly, absolutely, as labour-time is usually measured, in labour-hours or days, etc., but in a roundabout way, through exchange, relatively. That is why I can express this definite quantity of labour-time not in labour-hours -how many remains unknown to me- but only in a roundabout way, relatively, in another commodity, which represents an equal quantity of social labour-time. The clock is worth as much as the piece of cloth." (1976, p. 399)

We realize that what is needed to express the labour time embodied in a commodity, is not one sole commodity, viz., a clock whatever "absolute value" or units of labour time von Bortkiewicz might have found in it, but at least another commodity in so far as labour time is not an intrinsic property of a commodity, but a relation, moreover social. Therefore, without another commodity, viz., cloth, it is impossible for the clock to express its value, viz., the social labour embodied in it.<sup>4/</sup> To express the value of a commodity directly,

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<sup>3</sup> For instance, "The product can be made a function of labour-time only if the elements in the process of its production can be reduced to and expressed in labour-time terms." (Cutler et al., 1977, p. 42)

<sup>4</sup> "It [a commodity] never assumes this [value] form when isolated, but only when placed in a value or exchange relation with another commodity of a different kind." (Marx, 1918, p. 70)



absolutely, viz., in units of labour time as such, would be as non-sensical as attempting to express the weight of a heavy body, say, a lump of sugar, without relating it to another heavy body, viz., several pieces of iron previously weighted. It is only by means of the relation the lump of sugar establishes with iron that mass manifests itself and therefore the weight of the lump of sugar could be found out.

But let us return to von Bortkiewicz's definition of "absolute value". He has not told us that the labour time of a commodity is expressed in the value of another commodity. That is to say, by means of one commodity, say A, entering in a relation of exchange with another commodity, and hence A expressing its exchange value in commodity B, for example. On the contrary, he claims that the value of commodity A can express directly, absolutely, the quantity of labour employed in commodity A, without having recourse to any other commodity. By turning the value of a commodity into the direct expression of the labour time that it contains, he has done away with exchange value. For him, the value of commodity A could be expressed in terms of "absolute value, which is identical to the quantity of labour employed in its production" (emphasis added). Any divergence between the socially necessary labour time needed to produce commodity A and the quantity of private labour that it contains is cast aside. According to von Bortkiewicz, whatever quantity of labour has been employed in commodity A, is to be reflected by its value without relating indirectly with other commodities. Hence, if in the private production of A twenty times more labour than the social average required to produce A would have been employed, von Bortkiewicz would assert that its value would be 20 times as much as the social average of A.

"It is lucky for Herr Dühring that fate did not make him a manufacturer, thus saving him from fixing the value of his commodities on the basis of this new rule and so running infallibly into the arms of bankruptcy. But say, are we still in the society of manufacturers here? No, far from it. With his natural cost of production and absolute value Herr Dühring has made us take a leap, a veritable salto mortale out of the present evil world of exploiters into his own economic commune of the future, into the pure heavenly air of equality and justice," (Engels, 1976, p. 255)

and so arrive at the conclusion, to put it mildly, that value, as a reflection of "absolute value" or units of labour time as such, has no operational significance.

Political economy is as little concerned with the "absolute



value" as commodity producing societies are with the labour time that one sole commodity, without entering into relation with other commodities, might have outside the market, in spite of von Bortkiewicz's most personal and private estimations of units of labour time as such.

Further, von Bortkiewicz's procedure suggests, at this early stage, his inability to express the value of a commodity by equating it to another commodity. That is, in an equational form between two commodities. Instead, he claims that value is expressed in a tautological identity with its own "absolute value" in an sterile reflection.

Let us carefully note -according to von Bortkiewicz's own multifariousness above-, any one "value can have no other meaning than"

- i) "the index of an exchange relationship";
- ii) in addition, "absolute value".

That is to say, for von Bortkiewicz value as an "absolute" does not mean value as an "index" which is value also, but not really, as they appear under different heading. Such duality of meaning opens the door to confusion and ambiguity while von Bortkiewicz claims, paradoxically, "to avoid misunderstandings due to the multiple significance of the concept of value." (1952, p. 6)

Marx denounces the procedure von Bortkiewicz imputes to him in a remark which is of main importance regarding the methodological differences between Marx and his objectors:

"All this is 'drivelling', In the first place De prime abord I do not start out from 'the concept of value', and do not have 'to divide' these in any way. What I start out from is the simplest social form in which the labour-product is represented in contemporary society, and this is the 'commodity'." (1975, p. 198)

While we will return to the procedure followed by Marx later on,<sup>5/</sup> we are warned against starting out from "concepts", and further introducing on that basis a duality of meaning, viz., the division of the "concept" of value as an "index" and as an "absolute".

After having so far considered the plausibility of "absolute value", let us proceed with von Bortkiewicz's dual meaning of value.

As far as value itself is concerned, von Bortkiewicz states that it is "merely the index of an exchange relationship" (1952, p. 5).

5 See Supplementary Notes 2. infra.

In other words, he regards value merely as the proportion -or proportions- of exchange, without any further qualification. It is as if the value of a commodity was, for von Bortkiewicz, something purely relative, purely fortuitous. That is to say, he is referring to value not as a necessary relation between two commodities but as a fortuitous reflection of a commodity; as if the value of commodities was not an exchange relationship, which he confirms as follows:

"Value is not an exchange-relationship, but [merely] the index of an exchange-relationship" (von Bortkiewicz, 1952, p. 12 n.)

Unfortunately for him, to claim that value is merely the index of an exchange relationship would simply serve to disprove himself <sup>6/</sup>. Meanwhile, his personal points of view expose an absurdity as they spread confusion.

It exposes an absurdity, as anybody familiar in any way with Ricardo's liquidators cannot fail to know. Their propositions were long ago exposed by Marx. Let Samuel Bailey be an illustrative example.

"Value denotes...merely the relation in which two objects stand to each other as exchangeable commodities." <sup>7/</sup>

In relation to this revelation, Marx observes:

"The most superficial form of exchange value, that is the quantitative relationship in which commodities exchange with one another, constitutes, according to Bailey, their value. The advance from the surface to the core of the problem is not permitted... Instead, he [Bailey] wanders off into all the categories of political economy in order to repeat the same monotonous litany over and over again, namely that the value is the exchange relation of commodities and consequently is not anything different from this relation." (Marx, 1971, pp. 139, 140)

But Bailey did not easily give up his convictions written at the beginning of his anonymously launched opusculum. He persists consistent, as he was bound to be, in his own personal -though not exclusive- views. He insists on exposing his superficial observations while displaying his limitations:

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6 If value was "merely the index" of an exchange relationship, viz., what appears in a relation of exchange, it would mean that it manifests itself in an exchange relationship. In other words, as the value of a commodity expresses its extent or magnitude of value, viz., relative value in terms of other commodities, it is representing its value in a particular relation of exchange, viz., exchange value. Hence, the value of a commodity is an exchange relationship.

7 Bailey, 1825, p. 5; emphasis added.

"It is impossible to designate, or express the value of a commodity, except by a quantity of some other commodity." 8/

Next, Marx keeps him in his insurmountable confines:

"(As impossible as it is to 'designate' or 'express' a thought except by a quantity of syllables. Hence Bailey concludes that a thought is -syllables.)" (Marx, 1971, p. 146)

Perchance, with some degree of hind -and foresight, it has been laconically observed by von Bortkiewicz that when he speaks of "'value' itself (for the sake of brevity I von Bortkiewicz do not say either 'relative value' or 'exchange value')" 9/ as for him value is merely an index, the Index. He could conclude, after this briefness, that one commodity does not relate to other commodities to express its relative value in a relation of exchange.<sup>10/</sup>

Let us see what the commodity is, while we briefly follow Marx.

Let us take a certain commodity. For instance, 500 grammes of butter. It would appear as if the value for which this commodity could exchange would be something completely relative, which -aside from constantly varying in time and place- could not be settled without bringing this commodity in relation with all the rest of its kind; as if exchange value was something innate, internal within the commodity.

However, it is known from experience that a certain commodity,  $\frac{1}{2}$  kilogramme of butter as before, is exchanged in the most diverse proportions for other commodities, i.e.: for x unbaked beans, for y Rolls-Royce limousines, for z steel etc. But as z steel, y Rolls-Royce limousines and x unbaked beans etc. represent the exchange value of 500 grammes of butter in an equation, x unbaked beans, y Rolls-Royce limousines, z steel &c. have necessarily to be exchange values permutable one for the other; in consequence equal among them-

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8 Bailey, 1825, p. 26; emphasis added.

9 1952, p. 5.

10 Short of abolishing "an exchange relationship", this is simply another specimen of his confusing procedure. Before, he claimed that when he speaks of value as an index, he does not mean value as an "absolute", which is value as well, but not quite the same. Meanwhile, he speaks of a "firm quantitative relationship" (1952, p. 5) between his dual meanings, while he strongly advises us not to confuse them. As could be seen, von Bortkiewicz is at pains to make himself understood, in spite of his ambiguities, both in "exposing" Marx and in the variegated notions advanced.



selves <sup>11/</sup>. It follows that the various exchange values of the same commodity all express something equal; and that the exchange value is, and can be but the expression of a content differentiable from it, its form of manifestation.

Now, when it has been said that, for instance, 50 decagrammes of butter = w barrels of petroleum, in order to have been equated, they -butter and petroleum- must have some common quality to the same extent, namely to the same magnitude. This common quality is neither butter nor petroleum. Nevertheless, it allows both commodities to be equated, and hence become equivalents; being compared as equal magnitudes qualitatively identical. It follows that to compare commodities as magnitudes of value among themselves, they have to be first and foremost, magnitudes of the same genus, homogeneous magnitudes. Or if preferred, qualitatively equal magnitudes or extents.

It should be remembered that the exchange value of commodities can be expressed in equations which are formulated in so far as the commodities undergo social intercourse. It follows that the exchange value of a commodity expresses a social role of commodities themselves, which has nothing to do with geometrical, physical, chemical, biological or any other natural property of the commodities. Now, the social substance common to all commodities is labour. And not simply labour, but social labour. In order to produce a commodity, it is required to incorporate in it or to invest in it a determinate quantity of social labour.

Whoever produces an object for himself, for his personal and direct use, for his own consumption to satisfy his personal needs, creates a useful product -or use-value-, but not a commodity. As an individual consumer of his own production he has got nothing to do with society. To produce a commodity it is necessary to produce an object which satisfies a social need of any kind, whose labour is to represent part of the sum total of social labour invested by society, of which it forms an integrating component. It follows that a commodity, in contradistinction to a useful product or use-value as

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<sup>11</sup> Seeing that contemporary economics is most fond of mathematics, we can observe that there are a number of equations with as many unknowns, one for each commodity in which the exchange value of the commodity butter is to be represented.

such, undergoes a process of exchange, to be consumed by another than that by whom it was produced.

To refer to the value of the commodities is to refer exclusively to the coagulated, realized labour in them. Therefore, the commodity has a value because it is the embodiment of social labour. As values, commodities are social magnitudes.

But be it enough with this digression and let us return to von Bortkiewicz. He has already told us that on the basis of "absolute value",

"The value of a good A could then be expressed as a certain number of time units of labour, e.g. as 12 days of labour." (1952, p. 5)

Therefore, according to von Bortkiewicz, each sole commodity is to reflect its own intrinsic "absolute value" through pure indexes or numéraires, viz., "value is merely the index".

Let us see how Marx analyses value as an exchange relationship, as von Bortkiewicz's procedure is simultaneously examined.

"In order to discover how the elementary expression of the value of a commodity lies hidden in the value relation of two commodities, we must, in the first place, consider the latter entirely apart from its quantitative aspect. The usual mode of procedure is generally the reverse, and in the value relation nothing is seen but the proportion between definite quantities of two different sorts of commodities that are considered equal to each other. It is apt to be forgotten that the magnitudes of different things can be compared quantitatively, only when those magnitudes are expressed in terms of the same unit. It is only as expressions of such unit that they are of the same denomination, and therefore, commensurable. (1)

1 The few economists, amongst whom is S. Bailey, who have occupied themselves with the analysis of the form of value, have been unable to arrive at any result, first, because they confuse the form of value with value itself; and second, because under the coarse influence of the practical bourgeois, they exclusively give their attention to the quantitative aspect of the question. 'The command of quantity ... constitutes value.' (Money and its Vicissitudes. London, 1837, p. 11. By S. Bailey)." (Marx, 1918, p. 57) \*

Von Bortkiewicz sees in the relation of exchange, merely its proportion. He is just concerned with the quantitative aspect of this expression:

"Whilst, however, 'value' itself (for the sake of brevity, I do not say either 'relative value' or 'exchange value') and 'absolute value' mean two quite different things, a firm quantitative relationship nevertheless prevails between them: the values of different goods bear the same proportion to each other as their absolute values". (1952, p. 5; emphasis added)

(\*) The emphasis throughout Marx's quotes from Capital are intended to correspond with those of the original German version.

Thus, in von Bortkiewicz, the commodities are not reduced to any common qualitative unit.<sup>12/</sup> On the contrary, he implies four quantitative relations in any one expression of commodity exchange. In order to illustrate his point, let us take commodity A and commodity B. By denoting value by w, the four quantitative relations would be expressed as follows:

$$w_A / w_B \quad ; \quad w_B / w_A$$

as far as "value is merely the index" is concerned, and

$$w_A = a.v.A \quad ; \quad w_B = a.v.B$$

reflecting a "firm quantitative relationship" between "value...merely the index" and "absolute value".

Let us see how Marx presents the qualitative equality -or common qualitative unit- of commodities.

"Whether twenty yards of linen = one coat or = twenty coats or = x coats -that is to say, whether a given quantity of linen is worth many or few coats- every such proportion includes the statement that the linen and the coats are expressions of the extent of value of the same unit, and are things of the same nature. Linen = coat is the ground of the equation."  
(Marx, 1908, p. 16) \*

Hence, linen and coat, as commodity values, have in common a qualitative property, which is expressed without the commodities changing their natural form. Marx observes that since the qualitative unit of the commodities is that of being coagulated human labour, it can be expressed first and foremost in a qualitative relation between commodities.<sup>13/</sup> It is only on the basis of this qualitative homogeneity that commodities can be expressed quantitatively as extents -or magnitudes-, and hence apt to undergo additivity, so as to be commensurable.

For von Bortkiewicz, the commodities do not have a common quality, i.e. homogeneity. On the contrary, each single commodity is to bear, in its place, an individual quantitative tautology, which he

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(\*) For Capital, vol. I, the quotations for the first IX chapters are drawn from Marx (1908) or Marx (1918). Quotes from chapters X to XXXIII are taken from Marx (1918).

12 Common qualitative unit does not mean common quantitative unit.

13. "If we say that, as Values, commodities are a mere protoplasmic mass of human labour, our analysis is reduced to a mere abstraction of value, but gives no form of value which is different from the natural form of the commodities." (Marx, 1908, p. 16)



calls "absolute value".<sup>14/</sup>

In contradistinction to Marx, von Bortkiewicz obliterates that to find out where the value relation between commodities lies, we have to dispense totally with the quantitative aspect of this relation. Von Bortkiewicz confirms himself as he claims that value is merely an index, i.e., a numéraire; or if preferred, an empty cipher devoid of content. Von Bortkiewicz exclusively sees but the proportion, i.e. value "merely the index" of a commodity as he disregards their qualitative common unit, i.e. that of being products of human labour, which constitute their very homogeneity. If von Bortkiewicz was to insist in adding up commodity values, he would just be adding indexes, devoid of any content whatsoever. It would be, at the most, a purely arithmetical -or a purely algebraic-exercise devoid of foundation.

To claim that "absolute value" could undergo a meaningful addition is to forget that in von Bortkiewicz value is directly identified with "absolute value", and hence, turned into an index. As a result,

"The value of a good A could then be expressed as a certain number of time units of labour, e.g. as 12 days of labour." (1952, p. 5)

Von Bortkiewicz's dual meanings of value would lead us to the following results. By confining the value of a commodity to "merely the index", he has pre-empted the homogeneous substance of value, viz., abstract human labour;<sup>15/</sup> and the extent of such homogeneous substance, viz. the magnitude of value. Thus value, for von Bortkiewicz, is to be "for the sake of brevity," exclusively the quantitative proportions or ratios that the commodities bear to each other.

By erecting a second meaning of value, viz., "absolute value of a commodity, which is identical with the quantity of labour employed in its production", secluded in one commodity, the common

<sup>14</sup> He confirms himself, as "absolute value" is to be regarded as a virtue of each one commodity on its own, separated from the rest, and confined to each one commodity in its isolation. Further, it could not be argued that the concrete and actual labour that each commodity has, embodied in the use-value of the commodity, could constitute homogeneity. Nothing of the sort. "As Use-values commodities can only be of different quality;" (Marx, 1908, p. 4) representing, above all, heterogeneity.

<sup>15</sup> The allusion to abstract labour and to qualitatively equal labour -or homogeneous labour- convey the same significance in this work. They regard labour independently of any quantitative determination and refer to the substance of commodity values.

substance of value is once again cast aside, alongside the extent of such substance. Only to offer, in its place, another set of proportions; those between value "merely the index" and "absolute value".

As before remarked, any expression of exchange between two commodities cannot be expressed in an equational form by von Bortkiewicz. On the contrary, any one expression of exchange has been over-identified by two tautological "absolute values", included within four quantitative proportions.

Before we proceed to consider further implications deriving from von Bortkiewicz's dual meanings of value, let us refer to his persistent admixtures of "goods" and commodities.

### 3. Commodities are replaced by "goods"

Let us see how von Bortkiewicz distinguishes the commodity from the good, as we turn back to the above quotation where he makes value the measure of value.

After speaking of

"the good serving as a measure of value," 16/  
he asserts that it exchanges for

"a commodity or for a quantitative unit of this commodity." 17/  
Next, he unveils

"the so-called 'absolute value' of a commodity," 18/  
to find in the next paragraph that he is exclusively speaking of "goods":

"the values of different goods bear the same proportion to each other as their absolute values", (von Bortkiewicz, 1952, p. 5)

Therefore, once he has bestowed the name of "good" on the commodity "serving as a measure of value", and once he has spoken of "the so-called 'absolute value' of a commodity," he discovers a posteriori that he is talking, in his parlance, simply of "goods".

The peculiar deduction of the "good" by von Bortkiewicz, is most haphazard, because for him to replace and to deduce are "in fact" identical discursive operations. He can conclude on his own grounds that commodities are "goods" by antonomasia.

Formally, he has replaced the commodity by "goods". At this stage, the reader would ask what has happened to use-value, which for

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16 1952, p. 5; emphasis added.

17 1952, p. 5; emphasis added.

18 1952, p. 5; emphasis added.



Marx is one of the two factors of the commodity <sup>19/</sup>. Marx gives the following clarification:

"Use-value as such, since it is independent of the determinate economic form, lies outside the sphere of investigation of political economy.\*

(\*) That is why German compilers write con amore about use-values, calling them 'goods'. See for example the section on 'goods' in L. Stein, System der Staatswissenschaft, Bd. I. Useful information on 'goods' may be found in 'manuals dealing with merchandise'." (Marx, 1970, p. 28)

According to Marx, therefore, use-value as such "lies outside the sphere of investigation of political economy."

Von Bortkiewicz finds himself speaking not of use-value in contradiction with the value, but of "goods". And it is upon this "goods" that he is just erecting his economic notions.<sup>20/</sup>

We find that von Bortkiewicz has conjured, at will, "goods" out of commodities, which are to replace not only the commodity, but in particular the material properties of the commodity, viz., its use-value.

It is upon "goods" -and not from the commodity- that he is providing a dual meaning of value -so far: "absolute value" and value as an "index" arising out of the "good" itself.

#### 4. Value is not an exchange relationship

Let us turn to Marx, who observes that the commodities arrive to the world in their use-value form as material objects. He observes that they are also materialization of value.

"The reality of the value of commodities differs in this respect from Dame Quickly, that we don't know 'where to have it.' The value of commodities is the very opposite of the coarse materiality of their substance, not an atom of matter enters into its composition. Turn and examine a single commodity, by itself, as we will. Yet in so far as it remains an object of value, it seems impossible to grasp it." (Marx, 1918, p. 55)

Of contrary opinion is von Bortkiewicz. He has found, all on his own, that the "absolute value" happens to be "identical with the quantity of labour employed in its production", as a private and isolated

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19 "The two Factors of a Commodity: Use-value and Value (Substance of Value, Extent of Value)." (Marx, 1908, p. 1)

20 The continuous confusion of the commodity and the "good" by von Bortkiewicz throughout his work would not make us fall into error, once we have taken due notice of this quid pro quo.

virtue of a commodity taken by itself. <sup>21/</sup> It is by examining a single commodity, by itself, on its own, that von Bortkiewicz discovers "absolute value".

Next, Marx insists on the common unit of the commodities: the social quality of being products of labour.

"If, however, we bear in mind that the value of commodities has a purely social reality, and that they acquire this reality only in so far as they are expressions or embodiments of one identical social substance, viz., human labour, it follows as a matter of course, that value can only manifest itself in the social relation of commodity to commodity. In fact we started from exchange value, or the exchange relation of commodities, in order to get at the value that lies hidden behind it. We must now return to this form under which value first appeared to us." (Marx, 1918, p. 53)

It is from an exchange relation between commodities that Marx is to unravel their value. This is in contradistinction to von Bortkiewicz, who on the one hand observes purely quantitative proportions, i.e. indexes sifted from the relation of exchange, <sup>22/</sup> and on the other hand, the "absolute value" in a commodity outside the exchange relationship.

In other words, von Bortkiewicz refers to quantity of labour not as a social relation but as a private and individual property that he assumes is intrinsic to a commodity.

Let us consider von Bortkiewicz's constraints, due to the "absolute value" of his "goods".

Von Bortkiewicz claims that "absolute value" of a commodity is "identical with the quantity of labour employed in its production" (1952, p. 5). Aside of articulating a vicious circle, it renders impossible to take account of any change in labour productivity:

"[T]he value of a commodity is determined not by the quantity of labour actually realized in it, but by the quantity of living labour necessary for its production. A commodity represents, say 6 working hours. If an invention is made by which it can be produced in 3 hours, the value, even of the commodity already produced, falls by half. It represents now 3 hours of social labour instead of the 6 formerly necessary. It is the quantity of labour required for its production, not the realized form of that labour,

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21 In this respect, he seems compelled to have a vast knowledge on the commodities he confronts:

"Amongst ordinary people the fictio juris prevails that every man, as a buyer of commodities, possesses an encyclopaedic knowledge of them." (Marx, 1908, p. 2 n.)

22 He has already told us that

"Value is not an exchange-relationship, but [merely] the index of an exchange-relationship" (1952, p. 12 n.)

by which the amount of the value of a commodity is determined." (Marx, 1918, p. 588) <sup>23/</sup>

As we can see, in order for "absolute value" to hold good, any alteration in labour productivity is banned.<sup>24/</sup> If the socially necessary labour to produce a commodity was to be altered, it would just bear the frail notion of "absolute value" in a "firm quantitative

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23 "It is thus only the quantity of socially necessary labour, or the socially necessary time of labour for the establishing of a Use-value, which regulates its extent of value... The single commodity here serves, in general, as an average example of its class."

(Marx, 1908, pp. 5, 6)

24 So as to emulate von Bortkiewicz in his interpretation of Marx, Rubin (1972, pp. 118, 119) embraces a dual notion of value: an "exchange proportion" and "'absolute' value". Finally, Rubin concludes that only on the assumption of an immutable productivity of labour, "value is a completely accurate and adequate form for expressing labor in its qualitative and quantitative aspects." Let us quote his lengthy adumbration in full.

"What relation exists between labor and value? The general answer to this question is: value is the adequate and exact form for expressing the content of value (i.e., labor). In order to clarify this idea, we return to the previous example: the table is exchanged for three chairs. We say that this process of exchange is determined by a certain regularity and depends on the development and changes in productivity of labor. But exchange value is the social form of the product of labor which not only expresses the changes of labor, but which also masks and hides these changes. It hides them because of the simple reason that exchange value presupposes a value relation between two commodities -between the table and the chairs. Thus changes in the exchange proportion between these two objects do not tell us whether the quantity of labor expended on the production of the table or the quantity of labor expended on the production of the chairs has changed. If the table, after a certain time, is exchanged for six chairs, the exchange value of the table has changed. However, the value of the table itself may not have changed at all. In order to analyze, in pure form, the dependence of the change of the social form of the product on the quantity of labor expended on its production, Marx has to divide the given event into two parts, to split it, and to say that we must analyze separately the causes which determine the 'absolute' value of the table and the causes which determine the 'absolute' value of the chairs; and that one and the same act of exchange (namely the fact that the table now exchanges for six chairs instead of three) may be brought about either by causes which act on the table, or by causes whose roots lie in the production of the chairs. To treat separately the effect of each of these causal chains, Marx had to split the changes of exchange value of the table into two parts, and to assume that these changes were brought about by causes which lay exclusively in the table, i.e., changes in the productivity of labor necessary for the production of the table. In other words, he had to assume that the chairs as well as all other commodities for which our table would exchange, maintain their previous value. Only with this assumption is value a completely accurate and adequate form for expressing labor in its qualitative and quantitative aspects."



relationship" with value "merely the index" <sup>25/</sup>. In order to justify his dual notions, he is constrained to refer to one single commodity.

Let us see to what conclusions von Bortkiewicz would have arrived if, as he says, the labour time employed in one commodity alone, is its value as an "absolute". Also, his proportionality is followed as its likelihood is tested by a practical criticism.

"It might seem that if the value of a commodity is determined by the quantity of labour time bestowed upon its production, the lazier a man, or clumsier a man, the more valuable his commodity. This, however, would be a sad mistake. You will recollect that I [Marx] used the word 'Social labour,' and many points are involved in this qualification of 'Social.' In saying that the value of a commodity is determined by the quantity of labour necessary for its production in a given state of society under certain social average conditions of production, with a given social average intensity and average skill of the labour employed." (1973, p. 37)

Let us retrace the most simple relation of exchange in the form that is advanced by Marx, as we find out why von Bortkiewicz has sublimated it.

"1. The two poles of the expression of value: -Relative Value-form and Equivalent-form

The secret of all forms of value is found in this simple form of value. Its analysis is a work of peculiar difficulty.

The two commodities A and B -in our example linen and a coat- evidently play two different parts. The linen expresses its value by the coat, which serves as the basis of such expression of value. The first commodity plays an active and the second a passive part. The value of the first commodity appears as relative value, or is found in the form of relative value; the second commodity serves as an equivalent, or is found in the form of an equivalent." (Marx, 1908, p. 14)

According to Marx, it is in the relation of exchange where the value of one commodity is expressed not as an absolute, but in a relative value form, establishing a relation with another commodity. It should not be overlooked that for von Bortkiewicz each sole commodity establishes a relation with "itself", viz., with its own "absolute value" <sup>26/</sup>. At the same time, each individual commodity

<sup>25</sup> For instance, if the time required to produce commodity A was to fall from 6 hours to 3 hours, the identity of "absolute value" with the value of such commodity would expose an incoherent ambiguity. From the actual reading of Marx's quotation it is transparent that what determines the value of a commodity is "not the quantity of labour actually realized in it, viz., "absolute value", but the "quantity of living labour necessary for its production."

<sup>26</sup> "Whilst, however, 'value' itself...and 'absolute value' mean two quite different things, a firm quantitative relationship nevertheless prevails between them" (1952, p. 5)



becomes "its own" equivalent reflecting its "absolute value".<sup>27/</sup>

Let us see how Marx dispels any tautological reflection of the commodities within themselves:

"The relative value-form and the equivalent form are two intimately connected, mutually dependent and inseparable elements of the expression of value; but, at the same time, are mutually exclusive, antagonistic extremes -i.e., poles of the same expression of value. They are allotted respectively to the two different commodities brought into relation by that expression. It is not possible to express the value of linen in linen. 20 yards of linen = 20 yards of linen is no expression of value. On the contrary, such an equation merely says that 20 yards of linen are nothing else than 20 yards of linen, a definite quantity of the use-value linen. The value of the linen can therefore be expressed only relatively -i.e., in some other commodity. The relative form of the value of the linen pre-supposes, therefore the presence of some other commodity -here the coat- under the form of an equivalent. On the other hand, the commodity that figures as the equivalent cannot at the same time assume the relative form of value. The second commodity is not the one whose value is expressed. Its function is merely to serve as the material in which the value of the first commodity is expressed." (Marx, 1918, pp. 56, 57)

In von Bortkiewicz, the relative form of value, and the equivalent form of value are to be comprised, as it were, within each single commodity. Far from excluding each other as opposed and antagonistic extremes, they are to conceal themselves inside each commodity as he attempts to hide such contradictory and mutually excluyent polarity.

Marx dissipates the possibility of any one commodity assuming at the same time both (relative and equivalent) forms in the same expression of value:

"No doubt, the expression 20 yards of linen = 1 coat, or 20 yards of linen are worth 1 coat, implies the opposite relation: 1 coat = 20 yards of linen, or 1 coat is worth 20 yards of linen. But in that case, I must reverse the equation, in order to express the value of the coat relatively; and, so soon as I do that the linen becomes the equivalent instead of the coat. A single commodity cannot, therefore, simultaneously assume, in the same expression of value, both forms. The very polarity of these forms makes them mutually exclusive." (Marx, 1918, p. 57)

In von Bortkiewicz, however, both poles are to be conveyed by each one of the two commodities in an expression of exchange.

Let us remember that von Bortkiewicz has not expressed a

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<sup>27</sup> "The value of a good A could then be expressed as a certain number of time units of labour, e.g. as 12 days of labour." (1952, p. 5)

relation of value in an equational form. If he had done so, he would have found himself with two reciprocal proportions devoid of determination -as they reciprocate simultaneously ad infinitum; and two "absolute values", being -each- outside the relation of exchange. In order to have expressed the commodities in the form of an equation, i.e.

250 grammes of butter = x unbaked beans,

he would have had to have been able to reduce them, first, to their qualitative equality, without any quantitative determination:

butter = unbaked beans.

Instead, and in so far as he reduces value to a mere proportion, he has advanced a tautological reflection between each commodity and itself,<sup>28/</sup> while value is confined to empty numéraires.

Marx dispels the possibility of any tautological reflection within a commodity, as he prescribes what would be required, if that was the case:

"In a sort of way, it is with man as with commodities. Since he comes into the world neither with a looking glass in his hand, nor as a Fichtian philosopher, to whom 'I am I' is sufficient, man first sees and recognises himself in other men. Peter only establishes his own identity as a man by first comparing himself with Paul as being of like kind. And thereby Paul, just as he stands in his Pauline personality, becomes to Peter the type of genus homo." (Marx, 1918, p. 61 n.)

If we are allowed to draw the analogy, let us observe, in contradistinction to von Bortkiewicz, that the commodities do not arrive to the world reflecting their own value in a mirror-like reflection<sup>29/</sup>. On the contrary, commodity A would have to relate to another commodity, say B. In its turn, commodity B serving as the equivalent of A, would be converted into the form of value of commodity A. It is the material corporeity of B that serves as a mirror for the value of A.

"The value of A, thus expressed in the use-value of B, has taken the form of relative value." (Marx, 1918, p. 61)

That is to say,

"The value of the commodity linen will therefore be expressed in the [/bodily/] form of the commodity coat -the value of the one commodity in the Use-value of the other." (Marx, 1908, p. 18)

28 "The value of a good A could then be expressed as a certain number of time units of labour, e.g. as 12 days of labour."  
(1952, p. 5)

29 See footnote 28.

In this connexion, and in order to dispel any doubt that value can be expressed as a pure quantity, Marx observes that precisely in order to determine quantitatively the value of a commodity, it has to be expressed in the bodily form of the commodity serving as equivalent, viz., a specific use-value. The linen becomes, in its natural form of linen, the representative of value in general. A qualitative identity between coat and linen is expressed in a determined extent, i.e.

20 yards of linen = x coat.

In analysing the equivalent form of the commodity, Marx warns us, yet again, against the error of perceiving in an expression of value between two commodities, a purely quantitative relation. He stresses that the equivalent form of a commodity does not comprise any quantitative determination of value whatsoever:

"Two coats may therefore express the extent of value of forty yards of linen, but they can never express their own extent of value -the extent of value of the coats. A superficial consideration of the fact that the equivalent in the equation of value never possesses anything beyond the mere form of a simple quantity of a thing (i.e., of a Use-value) has misled Bailey, and prevented him, and also many of his predecessors and followers, from seeing in the expression of value anything but a quantitative relation. The equivalent form of a commodity, however, does not retain any quantitative definition of value.

The first peculiarity which strikes us on attentively regarding the equivalent form is this: -Use-value becomes the visible form of its opposite, i.e., of Value."  
(Marx, 1908, p. 22)

Let us observe that for von Bortkiewicz, in so far as "value is merely the index", he has pre-empted any reference to the commodities as use-values, as for him the value of a commodity is not expressed in the prosaic and worldly use-value of another serving as an equivalent, but by an empty index or numéraire.

In analysing the equivalent form in the exchange relationship. the first characteristic that we discover in von Bortkiewicz, is that

i) the bodily use-value of the commodity disappears;

ii) substance and extent of value of commodities vanish.

Meanwhile, it would be impossible for him to express an exchange relation. He himself denies it, as he has cast aside even the means to express it, viz., the two factors of a commodity: use-value and value (substance of value, extent of value).



Marx warns us against von Bortkiewicz's credence that each sole commodity can express -or reflect- its own value, viz., a "firm quantitative relationship" between "absolute value" of a commodity and value "merely the index".

"As no commodity can be related to itself as its own equivalent, and thus cannot make its own natural form the expression of its own value, it must refer to another commodity as its equivalent, or make the natural form of another commodity the expression of its own value." (Marx, 1908, p. 22)

Paradoxically enough, von Bortkiewicz makes out of every single one commodity an equivalent of itself, reflecting its own "absolute value" through an index or numéraire, viz. value in his parlance. In order to confirm himself, he has assured us of the "firm quantitative relationship" between the value -"merely the index"- of a commodity and its own "absolute value".

For Marx, just as a commodity has two factors, use-value and value, it represents also a two-fold character of the labour represented in the commodities. That is to say, the different, heterogeneous qualities of the concrete labour of the weaver, of the tailor, etc.; and homogeneity of value, viz., abstract human labour.

"In the form of tailoring, as in the form of weaving, human labour-power is expended. Both therefore contain the common property of human labour, and in certain cases, e.g., as producers of value, they may only be contemplated from this point of view. There is no mystery in all this. But in the expression of value of a commodity the matter is turned round. In order, for example, to express the fact that the value of the linen is formed by the web not in its concrete form as web, but by its common property of human labour, the concrete labour (tailoring) which produces the equivalent of the linen is set over against it as the palpable representative of abstract human labour.

This is thus the second peculiarity of the equivalent-form, that concrete labour becomes the visible form of its opposite -abstract human labour."

(Marx, 1908, p. 24)

Let us observe that in von Bortkiewicz, concrete labour is pre-empted, as he has already done away with the use-value of the commodity, whose peculiarity is precisely that of being product of concrete labour.

Abstract human labour is cast aside as he avoids establishing any qualitative unit. He confirms himself as the "absolute value of a commodity, which is identical with the quantity of labour employed in its production" <sup>30/</sup> is a meaningless platitude.

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30 1952, p. 5; emphasis added.



Therefore, the second characteristic we discover in von Bortkiewicz while considering the equivalent form, is

- i) that the different immediate concrete labour fades away;
- ii) that the common property of human labour, viz., abstract human labour, is abolished.

As a result of our present consideration of the form of value in Marx, we can sum up by observing that for von Bortkiewicz every commodity acts as an equivalent of itself, conveying the odd idea that a commodity could not have any reference to any kind of value, of use-value, of concrete labour, of abstract human labour.<sup>31/</sup> He is left with pure -and ethereal- numéraires.

Let us return to Marx, who observes that concrete labour can also be private labour which has to convert itself into directly social labour -not by itself- but through the equivalent form.

"But while this concrete labour (tailoring) serves as the mere expression of indistinguishable human labour, it possesses the form of equality with other labour -the labour contained in the linen, and is therefore, albeit private labour, commodity producing labour, like all other, yet at the same time labour in a direct social form. Precisely on this account it is represented in a product which is directly exchangeable with another commodity. This is therefore the third peculiarity of the equivalent-form, that private labour takes the form of its opposite -labour in a direct social form."  
(Marx, 1908, p. 24)

While for von Bortkiewicz every commodity is to serve as its own equivalent, viz., a "firm quantitative relationship" between value "merely the index" and "absolute value of a commodity, which is identical with the quantity of labour employed in its production", his notions have the merit of presupposing that every commodity is directly exchangeable, moreover proportionally.

Precisely, in so far as

"when we say that a commodity is in the equivalent form, we express the fact that it is directly exchangeable with other commodities"<sup>32/</sup> and thanks to the very "firm quantitative relationship" between his dual meanings of value, von Bortkiewicz actually turns every commodity into an equivalent of itself. That is to say, directly exchangeable.

<sup>31</sup> Von Bortkiewicz confirms himself as "absolute value" is to be left, if at all, to his febrile imagination. As it is devoid of ground, he can estimate and ponder whatever he pleases on it. "Absolute value" is exposed as a most vacuous platitude open, indeed, to a "definitional" identification purely quantitative.

<sup>32</sup> Marx, 1918, p. 64.

"[T]he modern advocate of free-trade(ii), who is bound to get rid of his wares at any price, puts the stress on the quantitative side of the relative Value-form. For him, therefore, the expression of value has neither value nor extent of value beyond the exchange relationship indicated on the sheet containing the daily price-list.

(ii) Freihandelshausirer, free-trade hawker or pedlar.- J.B. [Ed.]" (Marx, 1908, p. 27)

Let us further proceed exposing the form of value -or exchange value- as we contrast it occasionally with von Bortkiewicz's substitutions in the guise of interpreting Marx.

The total or developed form of value, in Marx, viz.,

"z Commodity A = u Commodity B, or = v Commodity C, or = w Commodity D, or = x Commodity E, or = &c.

(20 Yards of Linen = 1 Coat, or = 10 lbs. of Tea, or = 40 lbs. of Coffee, or = 1 Quarter of Wheat, or = 2 Ounces of Gold, or =  $\frac{1}{2}$  Ton of Iron, or = &c.)" 33/

is the outcome of the simple form

20 yards of linen = x coat.

"By means of its Value-form, therefore, the linen no longer stands in social relationship with merely one other sort of commodity, but with the whole world of commodities. As a commodity it is a citizen of the world. At the same time the endless list of its expressions implies that the commodity-value is equivalent to the special form of Use-value in which it appears."

(Marx, 1908, p. 29)

Now, the value of one commodity, linen for example, is expressed in the rest of commodities. As before in Marx's exposition, there are as many equations as there are unknowns. We already know that the value of one commodity is expressed in the use-value of another commodity which serving as equivalent has not got any quantitative determination of value. The commodity linen would express its value in as many commodities as there can be. The extent of value of linen, i.e., its magnitude of value, is now expressed in the use-value of the world of commodities which can serve it, in succession, as equivalents.

The total form of value encounters the defect of presenting, however, an incomplete expression of relative value and a restricted equivalent form, each one excluding the rest. The inversion of the total form would expose:

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33 Marx, 1908, p. 28.

" C) General Value-form

1 Coat	=	}	20 <u>Yards of Linen</u> "
10 lbs. of Tea	=		
40 lbs. of Coffee	=		
1 Quarter of Wheat	=		
2 Ounces of Gold	=		
$\frac{1}{2}$ Ton of Iron	=		
x Commodity A	=		
Any other Commodity	=		

(Marx, 1908, p. 31)

Here we see that all commodities relate to one common equivalent in order to express their value. It is their relation to linen that denote the value of the rest.

Let us consider this general, universal value form in its its differentiation with the two previous forms of value (simple form; total or developed form).

"The two earlier forms express the value of a commodity either in a single commodity of another sort, or in a list of several other different commodities. In each case it is so to speak, the private business of the single commodity to give itself a Value-form, and this it achieves without the help of the other commodities. These, on the other hand, play the merely passive part of equivalents. The universal Value-form, on the other hand, arises only as the common building of the commodity world. One commodity alone obtains universal expression of value because at the same time all other commodities express their value in the same equivalent, and every new sort of commodity which makes its appearance must do the same. It appears therefore that the objective value of commodities, since it can only express the mere 'social existence' of these things, even by means of their versatile social relations, must be their Value-form, and consequently their socially valid form."

(Marx, 1908, p. 32)

We can observe that the general form of value endows the world of commodities the general social form of value. Here all commodities with the exception of one commodity, remain outside of the general equivalent form. Now,

"One commodity, the linen, is therefore found in the form of direct exchangeability with all other commodities, or in a direct social form, because and in so far as all other commodities are not found therein(mn).

(mn) The form of universal direct exchangeability is not generally by any means conceived as a contrasted commodity-form which is as inseparable from the form of not direct exchangeability as the positive nature of one pole of the magnet is from the negative nature of the other. It may be imagined that the stamp of direct exchangeability can be impressed at the same time on all commodities, just as one may imagine that all catholics may be made popes. With citizens of small calibre who see in the production of commodities



the ne plus ultra of human freedom and individual independence, it would of course be desirable that the improprieties connected with this form should be smoothed over, particularly that of the not direct exchangeability of commodities. The adornment of this Philistine topic constitutes Proudhon's Socialism, which, as I have shown elsewhere, does not, in any case, possess the advantage of originality, but was much better unfolded long before his time by Gray, Bray and others. This fact, however, does not prevent such wisdom from now-a-days passing, in certain circles, as 'science.' The Proudhon School, more than any other, has hidden itself behind the word 'science,' for 'where ideas fail, words are certain to fill their place at the right moment.'"  
(Marx, 1908, p. 34)

To assert -as von Bortkiewicz does- that "proportionality" holds between the value of commodities, and that a "firm quantitative relationship" exists between the value of a commodity and the quantity of labour employed in its production, would mean that every commodity is directly exchangeable, or that there are as many commodities serving as "general equivalents", as there are commodities.<sup>34/</sup> This just confirm the eternal harmony envisaged by Proudhon, emulated by von Bortkiewicz and criticised by Marx, above.

Whatever commodity von Bortkiewicz happens to encounter, it could serve as its own equivalent, justly reflecting its "absolute value" through value "merely the index" in a purely quantitative fashion. To what results we are lead by assuming that any one commodity can serve as an equivalent to express its own "absolute" value is expressed by Marx as follows:

"If the linen, or any other commodity playing the part of universal equivalent, should also at the same time partake of the relative Value-form, it must needs be its own equivalent. We thus have: -twenty yards of linen = twenty yards of linen, a piece of tautology which expresses neither value nor extent of value."  
(Marx, 1908, p. 34)

This piece of tautology, translated to von Bortkiewicz's original reads as follows:

"Whilst, however, 'value [merely the index]'... and 'absolute value' mean two quite different things, a firm quantitative relationship nevertheless prevails between them" <sup>35/</sup>

completed by

"The value of a good A could then be expressed as a certain number of time units of labour, e.g. as 12 days of labour." (1952, p. 5)

We simply confirm that in von Bortkiewicz's doctrine, the commodities

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34 As for von Bortkiewicz each sole commodity reflects its own value, no commodity is needed to serve as a general measure of value.

35 1952, p. 5; emphasis added.



are deprived both of substance and extent -or magnitude- of value; displaying, nevertheless, empty indexes, empty numéraires. In other words, von Bortkiewicz has turned every sole commodity into an. internal platitude, i.e.,

$$w_i = a.v.i \quad (i = 1, 2, \dots n)$$

Meanwhile, every commodity could become the general equivalent and assume the general form of value.

Marx explains the money form plainly, as an outcome of the general form of value (III), in turn based on the total or developed form (II) which expanded from the simple form of value (I).

"If, therefore, in Form III. we put the commodity gold in the place of the commodity linen, we have:-

D) The Money-form.

20 Yards of Linen	=	}	2 <u>Ounces of Gold.</u>
1 Coat	=		
10 lbs. of Tea	=		
40 lbs. of Coffee	=		
1 Quarter of Wheat	=		
$\frac{1}{2}$ Ton of Iron	=		
x Commodity A	=		

Essential changes take place in the transition from Form I. to Form II., and from Form II. to Form III. On the other hand, Form IV. differs in no particular from Form III., except that now gold instead of linen takes the universal Equivalent-form. Gold remains in Form IV. what linen was in Form III.-the universal equivalent. This advance consists only in the fact that the form of direct universal exchangeability, or the universal Equivalent-form, now, by social custom, finally becomes identical with the specific natural form of the commodity gold."

(Marx, 1908, pp. 35, 36)

As soon as gold acquires the monopoly as general equivalent and adheres definitively by the force of social custom, it becomes the expression of value of the commodity money. That is to say, the money form of value is converted in the general form.

In the money form of value, direct exchangeability becomes the exclusive social property of the commodity gold, viz., the commodity money.

The price form is but the relative expression of commodity values in the money commodity. In other words, all the rest of commodities, gold excluded, would have to express their value in a relative form, viz., in the price form, as they use the physical corporeity of gold, the money commodity, as general equivalent.

"The simple relative expression of value of a commodity (the linen for example), in the case of the commodity operating as the money-commodity (the gold for example), is the Price-form. The Price-form of the linen is therefore

20 Yards of Linen = 2 Ounces of Gold,

or if £2 Sterling is the name given to 2 Ounces of Gold in coin,

20 Yards of Linen = £2 Sterling.

The difficulty in the notion of the Money-form is limited to grasping the idea of the universal Equivalent-form and thus of universal Value-form in general -Form III. Form III. is resolved by reference to Form II., the developed Value-form, the constituent elements of which are found in Form I. :

Twenty yards of linen = one coat, or  $x$  commodity A =  $y$  commodity B. The simple Commodity-form is therefore the germ of the Money-form." (Marx, 1908, p. 36)

It is important to take notice that the commodity money, viz., gold, cannot have a price. If the commodity money, as general equivalent that it is, was to partake at the same time the relative value form, it would have to officiate as its own equivalent, viz.,

2 ounces of gold = 2 ounces of gold;

a tautology that neither expresses

i) substance and/or extent of value,

nor

ii) price form.

At the same time, a vacuous statement would be implied, viz. "the price of money is the price of money."

We have been following Marx in some detail to observe how he analyses the exchange relationship or form of value. It provides a vantage point for a better understanding of von Bortkiewicz's unfortunate interpretation of Marx so far provided.

We have seen that von Bortkiewicz turns the value of a commodity into the direct expression of labour time that such sole commodity contains. In consequence, he has done away with exchange value, as for him it is not through a relation of exchange between commodities that he ascertains their equivalence. Instead, he stresses a tautological relation between the commodity and itself, as a unique specimen, regardless of the socially necessary labour time it takes to produce such commodity as an average example of its class.

After von Bortkiewicz has tautologically identified value with the quantity of labour employed in its production, viz. "absolute value", he simultaneously regards value as "merely the index of an

exchange relationship". That is to say, through pure numéraires.

Quite aside of the multifariousness of values that this dual concept comprises, von Bortkiewicz regards but the quantitative proportion between commodities, viz., value merely "the index" or within the commodity, viz., "absolute value" expressed as "time units of labour" as such. By only referring to the quantitative proportion between commodities, he precludes the common qualitative basis, or homogeneity, that allows commodities to be compared quantitatively as expressions of the same substance. It is precisely by obliterating the homogeneity of commodities, viz. abstract human labour, that he operates with value merely as an "index" or as a unit. That is to say, as a numéraire devoid of content.

While Marx analyses commodity values as an exchange relation, von Bortkiewicz claims nevertheless that value is not an exchange relation as he regards merely the quantitative proportion(s). That is to say, once von Bortkiewicz has disposed of value as an exchange relation, he is jettisoning the social substance of commodities. As if this was not enough, he claims to follow Marx by confusing the commodity with "goods", with systematic persistence.

The money form of commodities is exposed by Marx as a development of the very exchange relationship, whereby the commodity, say A, expresses its value by relating to another commodity providing the material for such expression, viz., serving as equivalent; say commodity B.

Let us bear in mind that for von Bortkiewicz value is not a social relation between commodities, as he avoids common ground or homogeneity, viz. abstract human labour. Therefore, once he reduces value to merely the index or to a proportion, no equivalence could take place between say, a pair of commodities. Instead, he could observe merely two reciprocal indexes of an exchange relationship; let alone two further indexes as the value of each commodity, say A and B, can be expressed as such and such units of labour time.

It has been exposed above, while regarding the equivalent form borne by the exchange relationship, that the use-value of the commodity, and that the substance and extent of value vanish in von Bortkiewicz. He confirms himself as he can just see value as a cipher, a numéraire, an index. It was also exposed that once the material form of the commodity, viz., the use-value, is jettisoned, concrete labour fades away, alongside abstract human labour, which constitutes the



very homogeneity or qualitative equality of commodities.

Far from following Marx in the analysis of money whereby a commodity takes the universal equivalent form in which the rest of the commodities express their value in the form of price, von Bortkiewicz makes a short cut by imputing to Marx a tautological identity within each commodity. That is to say, between whatever quantity of private labour might have been employed in a commodity and the value that it is to reflect. Hence, von Bortkiewicz supplants money as the general equivalent so as to make each commodity a special equivalent of itself in a tautological manner. As a result, the commodities in von Bortkiewicz would not need to refer to the commodity money to express their price.

Once the use-value of the commodity and the concrete labour which it entails are disposed of; once the substance and extent of value are precluded, von Bortkiewicz is left with pure indexes or numéraires denuded of any content, meaning or determination.

Von Bortkiewicz's despoliation of value is confirmed as he presupposes that a "firm quantitative relationship nevertheless prevails" between the value of a commodity and whatever quantity of fortuitous and private labour has been presumably employed in its production. He presupposes this "relationship" regardless of the socially necessary labour time, and concomitantly, of its expression in the general equivalent or commodity money. For von Bortkiewicz has assumed that every commodity is directly exchangeable. By turning every commodity into a special equivalent of itself, he has abolished the money commodity.

Finally, since von Bortkiewicz starts with tautological reflections, he cannot avoid proceeding with ambiguities which lead to self-destructive conclusions.<sup>36/</sup> Marx, on the contrary, analyzes the commodity as it presents itself, disclosing the relation that the form of value entails, unfolding the contradiction between use-value and value in tracing back the development of commodities and money.

<sup>36</sup> Von Bortkiewicz is ostensibly an ingenious person. If he would have found in Capital -not to mention the rest of Marx's works -one single passage supporting his conclusions, it is beyond doubt that he would have quoted it. But since there is not a passage useful to his ends, he is forced to resort to the art of clairvoyance, as it were, of which he bears witness by stating that "he [Marx] has absolute value in mind". However, any practitioner of such trade will no doubt encounter difficulties to prove his assertions derived thereof.



## 5. Value is made identical to prices

Marx operates with the simplifying assumption that gold is the money commodity. The function of gold is to serve as a general measure of value, i.e., the function of general equivalent that makes gold serve as money <sup>37/</sup>.

In von Bortkiewicz, any commodity whatsoever can be the measure of its own value, as it is to reflect the quantity of labour employed in it, and hence serve as a measure of value:

"[T]he values of different goods bear the same proportion to each other as their absolute values, and this proportionality, which constitutes the substance of the Marxian Law of Value [sic], holds good for any measure of value." <sup>38/</sup>

Hence, von Bortkiewicz jettisons the general form of value, viz., gold, which serves as the exclusive general equivalent (money) in which the rest of commodities express their price form. In von Bortkiewicz any particular commodity can be the measure of value. That is to say, any one commodity can be money itself within his presupposed direct exchangeability. For any one commodity, its value would be tantamount to its price and its price tantamount to its value.<sup>39/</sup> In other words, measure of value becomes for him, of price, which he confirms for us as follows:

"Let G be the good which serves as measure of value and of price."  
(1952, p. 10; emphasis added)

At the same time, price is also reduced to an index; a numéraire without any substance or extent of value:

"Price is also, however, like value, [merely] the index."  
(1952, p. 10; emphasis added)

On the contrary, Marx exposes that the price of a commodity is its expression of value in terms of money; the exclusive general

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37 "We will suppose, for the sake of simplicity, that gold is the commodity which performs the function of money.

The first function of gold is to furnish to the mass of commodities the material in which they may express their values as measures of the same denomination, of the same quality, and comparable in respect of their quantity. It operates as a universal measure of value. It is in virtue of that function that gold, the equivalent commodity, becomes money." (1908, p. 58)

38 Von Bortkiewicz, 1952, p. 5; emphasis added.

39 "The element that contradistinguishes the Neo-Ricardian theory from that of Marx is a restrictive definition of the concept of 'value', identified, in fact, with 'exchange value' or price."  
(Medio, 1974, pp. 120, 121)

equivalent in which the substance and extent of value do manifest.

Within von Bortkiewicz's peculiar -though not original- notions, the same value has very different prices and consequently just as many different values. That is to say, value are the prices, as any commodity can be the measure of value.

"[T]hus himself [Dühring] stating that the same value has very different prices and consequently also just as many different values. If Hegel had not died long ago, he would hang himself; with all this theologizing he could not have thought up this value which has as many different values as it has prices. Once again, it needs someone with Herr Dühring's brashness to inaugurate a new and deeper foundation for economics with the declaration that there is no difference between price and value, except that one is expressed in money and the other is not." (Engels, 1976, pp. 239, 240)

Let us further consider von Bortkiewicz's tenets as far as the simultaneous multiplicity of value is concerned.

First, he makes every commodity the measure of its own value, in a tautological manner:

"The value of a good A could then be expressed as a certain number of time units of labour, e.g. as 12 days of labour." (1952, p. 5)

By considering any such a good as an application of the "absolute value" of labour time,

"nothing is easier than to prove that all commodities whose value is constituted by labour time will always be exchangeable, will be money." (Marx, 1978, p. 73)

Due to this tautological procedure, von Bortkiewicz does away with value as a relation of exchange between two commodities, since every commodity is claimed to be the measure of its own value. In other words, he monetizes every commodity. There would be, so far, as many measures of value as there are commodities, all of them co-existing simultaneously.

However, von Bortkiewicz is not altogether satisfied with the multiplicity of values springing from his credence that every commodity is to serve as its own measure of value, secluded from all the rest, viz., "absolute value". At this stage, he remembers that commodities undergo exchange. In this respect he warns us, as quoted earlier, that

"Whilst, however, 'value' itself...and 'absolute value' mean two quite different things, a firm quantitative relationship nevertheless prevails between them: the values of different goods

bear the same proportion to each other as their absolute values, and this proportionality, which constitutes the substance of the Marxian Law of Value [sic], holds good for any measure of value." (1952, p. 5)

While "absolute value of a commodity, which is identical with the quantity of labour employed in its production" <sup>40</sup> is to bear a "firm quantitative relationship" with value, viz., "the values of different goods bear the same proportion to each other as their absolute values," in von Bortkiewicz

"labour is still put forward quite generally as something which 'costs,' hence as something which measures value, quite irrespective of whether it is expended under normal average conditions or not. Whether the producers use ten days, or only one, for the preparation of products which could be prepared in one day; whether they employ the best or the worst tools; whether they expend their labour time in the production of socially necessary articles and in the socially required quantity, or whether they make quite undesired articles or desired articles in quantities above or below the demand -about all this, there is not a word: labour is labour, the product of equal labour must be exchanged against the product of equal labour. Rodbertus, who is otherwise ready, whether rightly or not, to adopt the national standpoint and to survey the relations of individual producers from the high watchtower of general social considerations, carefully avoids doing so here. And this, indeed, solely because from the very first line of his book he makes directly for the utopia of labour money and because any investigation of labour in its property of producing value would be bound to put insuperable obstacles in his way. His instinct was here considerably stronger than his power of abstract thought, which, by the by, is revealed in Rodbertus by the most concrete absence of ideas.

The transition to utopia is now made in a hand's turn. The 'measures,' which ensure exchange of commodities according to labour value as the invariable rule, do not cause any difficulty. The other utopians from this tendency, from Gray to Proudhon, rack their brains to invent social institutions which would achieve this aim. They attempt at least to solve the economic questions in an economic way through the action of the possessors themselves who own the commodities to be exchanged. For Rodbertus it is much easier. As a good Prussian he appeals to the state: a decree of the state power orders the reform.

In this way then, value is happily 'constituted,' but not by any means the priority in this constitution which is claimed by Rodbertus. On the contrary, Gray as well as Bray -among many others- before Rodbertus, often at length and to the point of satiety, repeated this idea, viz., the pious desire for measures by means of which products would always and under all circumstances be exchanged only at their labour value."

(Engels, 1978, pp. 10, 11; emphasis added)

Let us see at what results we would arrive by following von Bortkiewicz's claims, while we contrast his secluded labour time with social conditions of labour prevailing at a particular time.

<sup>40</sup> Von Bortkiewicz, 1952, p. 5; emphasis added.



"Social conditions remaining the same, two equal private products may embody an unequal quantity of individual labour, but they always embody only an equal quantity of general human labour. An unskilled smith may make five horseshoes in the same time as a skilful smith makes ten. But society does not make the accidental lack of skill of an individual the basis of valuation; it recognizes as general human labour only labour of a normal average degree of skill at a particular time. Therefore, one of the five horseshoes made by the first smith has no more value in exchange than one of the ten made by the other in the same time. Individual labour contains general human labour only in so far as it is socially necessary."

(Engels, 1976, pp. 398, 399)

From this, two things follow.

First, von Bortkiewicz confirms himself in bestowing false imputations in Marx.

Second, according to von Bortkiewicz's "proportionality," the value at which commodities exchange and their "absolute value" would remain without any sort of actual relation to each other, not to mention by themselves. But to be fair to him, he has already asserted that "Value is not an exchange relationship" <sup>41/</sup>. What is it then? "Value is merely the index of an exchange relationship" <sup>42/</sup>.

Let us expound more fully his multiplicity of value, as we take into account the duality of value, viz., value "merely the index" and value an "absolute".

In the case of two commodities, say A and B, we would have in consequence, four indexes. The value of A and the value of B, each as a tautological relation to itself; and two further indexes; the value of A in relation to B and vice versa, in a reciprocal manner.

The above four indexes in the case of two commodities are to be held in order to fulfil von Bortkiewicz's requirements of value being merely the index of an exchange relationship, either with itself in a tautological manner, or with the rest of the commodities.

To generalize, for n "goods" there would be n "absolute values" plus  $\frac{n(n-1)}{2}$  exchanges times 2 indexes associated with each exchange. That is to say,

$$n + \frac{n(n-1)}{2} \times 2 = n + (n-1) = n^2$$

values for von Bortkiewicz.

While in von Bortkiewicz there are as many measures of value as there are commodities, the general equivalent in which commodities

<sup>41</sup> 1952, p. 12 n. 18; emphasis added.

<sup>42</sup> 1952, p. 5.



express their price form is cast aside. Therefore, the value of a commodity is made identical to prices -or vice versa.

It is unfortunate that although von Bortkiewicz operated with axioms, he did not at this stage express his claimed findings in Marx in the form of theorems -which spared him the process of supplying any proof. For the sake of clarity let us enunciate these axioms of his more precisely.

For each of the  $n$  "goods" there would be as many as  $n(n)$  prices depending on the  $n^{\text{th}}$  "good which serves as measure of value and of price." The  $n(n)$  prices, axiomatically identical to "the  $\sqrt[n(n)]{\phantom{x}}$  values of the different goods bear the same proportion to each other as their absolute values".

In this chapter, we have followed Marx's exposition of the value form, while we have allowed ourselves to draw the difference with von Bortkiewicz's brief tenets. In considering value we have actually referred but to labour materialized in commodities. Extent -or magnitude- of value is but the translation in commodity production, of the measure of value according to its -labour- duration,<sup>43/</sup> which takes its definite form in the commodity money, vulgo prices.

"It is not money which renders commodities commensurable. On the contrary, it is because commodities, as so many values, are materialized human labour, and therefore commensurable one amongst another, that they can all measure their values by one special commodity, and so transform the latter into money -that is to say, make it their common measure. But the measure of values by money is the form which ought necessarily to invest their inherent measure, the duration of labour".  
(Marx, 1908, p. 58)

Once it has been exposed that substance of value and extent of value are the necessary form that human labour and its duration respectively take in commodity production, there would be no room left for a dual meaning of value, viz. value and "absolute value." The ambiguity and evasion of this parallel chimera, would just expose its emptiness.<sup>44/</sup> A chimera that fulfills also the role of emptying

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43 "Classical / Political economy has, though somewhat imperfectly, analysed value and extent of value... But it has never demanded to know why labour is represented in value, and the measure of the labour, by its duration, in the extent of value of its products."  
(Marx, 1908, pp. 45, 46)

We have been assuming average, simple social labour. The reduction from compound to simple labour is discussed later on (see Supplementary Notes A. 3. c.).

44 In the words of de Brunhoff:

"Money as a commodity has a value in which that of other commodities

substance, extent, and measure of value.

Further, Marx refutes, albeit again, the incorrect notion that value or its expression as price is the direct representation of x quantity of labour, as he points out the Utopian character of this notion. At the same time, he reminds us of the absence of proportionality in a world where private and independent producers execute -or control- the production of commodities behind each others' backs.

"To ask why money does not immediately represent the labour time itself, as a bill represents say x hours of labour, is like asking why, the fact of commodity-production being given, labour-products must take the form of commodities, or why private labour cannot be treated as social labour -that is, as its opposite. I have dealt elsewhere with the Utopia of 'money the reward of labour,' in the midst of actual production itself. It may be remarked again in this place that the labour-money of Owen, for example, is no more money than is the counterfoil of a theatre ticket. Owen supposes, to begin with, a socialised labour, which is a form of production diametrically opposed to commodity-production. With him the certificate of labour meant simply the individual part of the producer in the common labour, and his individual right to that fraction of the common product destined to consumption. It never entered into Owen's mind to suppose commodity-production on the one hand, and to seek to escape on the other hand from his own inevitable conditions by the intricacies of money."  
(Marx, 1908, p. 58 n)

As observed earlier, von Bortkiewicz has jettisoned money as the exclusive commodity serving as a measure of value for the rest. For him each commodity is to measure its own value, without recourse to another commodity. In other words, he has abolished the exclusive and pre-eminent characteristic of money -that of being the general

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are reflected. Here we go from the 'immanent' measure of exchange value to an external measure, concretised into a specific commodity."  
(1973, p. 427)

It is incorrect to claim that the value of commodities is "reflected" in the value of the commodity money. Meanwhile, the value (of money) "reflects" the measure of value (of commodities) and vice versa, in an endless vicious circle, sporting a tautological reflection. De Brunhoff forgot that the "other commodities" in so far as they are products of human labour, viz., values, relate to the commodity money. In turn, the use-value of the commodity money serves as the means of expression for the value of the rest of commodities, while the general equivalent, viz., the commodity money, has not got any quantitative determination of value in such relation. On the one hand, de Brunhoff confuses here value with use-value; on the other, and once she has tautologically identified the value of money as a reflection of the value of commodities, she contradicts herself by splitting money into a) "the 'immanent' measure of exchange [sic] value", and b) "an external measure of value"; from which she claims to depart and arrive, respectively.

measure of value. Money is to be, for him, exclusively a standard of price and accounting money, devoid of any substance and magnitude of value.

It is to regret that von Bortkiewicz overlooked Marx's observations on James Steuart. They are most important for us, as they expose and refute von Bortkiewicz in a succinct manner. We will allow ourselves to quote them at length, as it shows old errors classical political economy made in the eighteenth century.

"Steuart simply considers money as it appears in the sphere of circulation, i.e., as standard of price and as money of account. If different commodities are quoted at 15s., 20s. and 36s. respectively in a price list, then in a comparison of their value both the silver content of the shilling and its name are indeed quite irrelevant. Everything is now expressed in numerical relations of 15, 20 and 36, and the numeral one has become the sole unit of measure. The purely abstract expression of a proportion is after all only the abstract numerical proportion. In order to be consistent, Steuart therefore had to abandon not only gold and silver but also their legal designations. But since he does not understand how the measure of value is transformed into the standard of price, he naturally thinks that the particular quantity of gold which serves as a unit of measure is, as a measure related to values as such [*viz.*, "absolute" values], and not to other quantities of gold. Because commodities appear to be magnitudes of the same denomination as a result of the conversion of their exchange-values into prices, Steuart denies the existence of the characteristic feature of the measure which reduces commodities to the same denomination, and since in this comparison of different quantities of gold the quantity of gold which serves as a standard is conventionally established, he denies that it must be established at all. Instead of calling a 360th part of a circle a degree, he might call a 180th part a degree; the right angle would then measure not 90 degrees but 45, and the measurements of acute and obtuse angles would change correspondingly. Nevertheless, the measure of the angle would remain firstly a qualitatively determined mathematical figure, the circle, and secondly a quantitatively determined section of the circle." (Marx, 1970, pp. 80, 81)

Von Bortkiewicz, in its turn, has just exposed that price (i.e. the expression of value of commodities in terms of money), merely "the index" should just be considered as it appears in circulation, and that only such quantitative index should be regarded. Hence, the expression of value would just be numerical relations, *viz.*, indexes or numéraires. "And the numeral one" devoid of any content and extent, "becomes the sole unit of measure." Von Bortkiewicz is, in consequence, left with a parade of empty proportions, while he has abandoned gold, as for him, this proportionality "holds good for any measure of value." Von Bortkiewicz denies the "characteristic feature of measure which



reduces commodities to the same denomination", viz., magnitudes of human labour, as he turns every commodity into a "measure of itself": there is a "firm quantitative relationship" in between value "the index" and "absolute value of a commodity, which is identical with the quantity of labour employed in its production".

As we have seen, a commodity value is, firstly, a qualitatively determined social relation, and secondly, a quantitatively determined extent of value.

"For example: -forty yards of linen are 'worth' -what? Two coats."<sup>45/</sup> as far as its simple form of value is illustrated. Or,

"20 Yards of Linen = 2 Ounces of Gold," <sup>46/</sup>  
or even,

"20 Yards of Linen = £2 Sterling." <sup>47/</sup>

Von Bortkiewicz, on the contrary, would see merely proportions. For instance,

$$40/2 \quad ; \quad 2/40$$

or

$$20/2 \quad ; \quad 2/20$$

as far as value -or price- is "merely the index". Now, it is ostensible that for him, substance and magnitude of value are cast aside. That those proportions are devoid of homogeneity and of additivity. And to note the obvious, that such "expressions of exchange" preclude an equational form. Nevertheless, von Bortkiewicz claims that it is possible to move further from those tautologically reciprocal ratios and engage in working with total value and total price. If, according to his constraints not even two pairs of ratios could be added up, it is beyond elementary logic that he could add them all.

In this respect, he proceeds to challenge a contemporary economist of his:

"Böhm-Bawerk is wrong in doubting the justification for working with total value and total price. Value is not an exchange-relationship, but [merely] the index of an exchange-relationship, and one may very well sum up a series of magnitudes [sic] of value. The same holds true of price." (1952, p. 12 n.)

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<sup>45</sup> Marx, 1908, p. 21.

<sup>46</sup> Marx, 1908, p. 36.

<sup>47</sup> Marx, 1908, p. 36.



As far as von Bortkiewicz's claims are concerned, price -or value- "merely the index" disproves his own assertion. To believe that it is possible, proves nothing at all.

In this respect, Böhm-Bawerk is consistent within his own constraints, as he claims, like von Bortkiewicz, that value is but a reversible proportion ad infinitum:

"For instance, what the tea is worth more than the iron the iron is worth less than the tea and vice versa." (1949, p. 35)

Therefore, he can conclude that

"There can clearly only be a question of an exchange relation between different separate commodities among each other." (1949, p.34)

Then

"As soon, however as one looks at all commodities as a whole and sums up the prices, one must studiously and of necessity avoid looking at the relations existing inside this whole. The internal relative differences of price do compensate each other in the sum total." 48/

That is to say, they are equal to nought, as they cancel out.

In consequence, for Böhm-Bawerk to sum the prices of commodities as a whole, would be an exercise precluded by the pure exchange proportions, with which he claims, it has nothing to do.

Finally, Böhm-Bawerk concludes that total price is an evasion, having nothing to do with the price at which individual commodities exchange:

"In any case, when we ask for information regarding the exchange of commodities in political economy it is no answer to our question to be told the total price which they bring when taken altogether, any more than if, on asking by how many fewer minutes the winner in a prize race had covered the course than his competitor, we were to be told that all competitors together had taken twenty-five minutes and thirteenth seconds." (1949, p. 35)

For Böhm-Bawerk there is no value, or price, aside of the numéraires that he confronts in the market. To add prices, and reach a total price, would have nothing to do with the ratios for which commodities reciprocally exchange and annul or compensate each other, as nothing else is seen between a couple of ratios.<sup>49/</sup> To use Marx's words, "The

48 Böhm-Bawerk, 1949, pp. 34, 35.

49 He even interdicts Marx to determining the value of all commodities taken together:

"He [Marx] does not after all connect the influence ascribed to the law of value, in virtue of which this law determines the exchange relations of the separate commodities, but only with another assumed function (concerning the highly problematical nature of which we have already passed an opinion), namely, the determination of the aggregate

advance from the surface to the core of the problem is not permitted." (1971, p. 139)

Let us recapitulate the implications of von Bortkiewicz's argument.

For  $n$  "goods" there would be  $n(n)$  values - "the indexes". That is to say,

$$w_i / w_j \quad (i = 1, 2, \dots, n); (j = 1, 2, \dots, n)$$

"[T]he  $n(n)$  values of different goods bear the same proportion to each other as their absolute values,"<sup>50</sup> Between value "the index" and value an "absolute", a "firm quantitative relationship nevertheless prevails".<sup>51</sup> Hence,

$$w_i = k a.v.i \quad (i = 1, 2, \dots, n)$$

In consequence, there are, at least, as many tautological identities ( $n$ ), as there are "goods". All his  $n$  "goods" are overidentified and precluding any solution proper (or unique solution).

Further, it is confirmed that von Bortkiewicz has crushed the characteristic relation of value that takes place in exchange. In his words, "Value is not an exchange relationship" (1952, p. 12 n.).

In analysing in this chapter the form of value, we found that von Bortkiewicz has sifted numéraires by spiriting away the substance and magnitude of value represented in the very exchange relationship. As a result, his values are devoid of homogeneity and additivity. He confirms himself as he cannot present value in an equational form.

value of all commodities taken together. In this application, as we have noticed ourselves, the law of value has no meaning whatever. If the idea and the law of value are to be brought to bear -and Marx certainly means that they should- on the exchange relations of goods,<sup>1</sup> then there is no sense in applying the idea and the law to an aggregate which as such cannot be subject to those relations. As no exchange of this aggregate takes place, there is naturally neither a measure nor a determinant for its exchange, and therefore it cannot give material for a "law of value." If, however, the law of value has no real influence at all on a chimerical 'aggregate value of all commodities taken together,' there can be no further application of its influence to other relations, and the whole logical series which Marx endeavored to work out with such seeming cogency hangs therefore in the air.

<sup>1</sup> As I [Böhm-Bawerk] have already mentioned, I shall take special notice later of the different view of W. Sombart." (1949, pp. 56, 57)

<sup>50</sup> 1952, p. 5; emphasis added.

<sup>51</sup> 1952, p. 5; emphasis added.

His tautologies (between value "the index" and value the "absolute"; or between price "the index" and value the "absolute") confine each "good" to its splendid isolation.

Money, the exclusive general equivalent, to which all commodities relate to express their value in their price form, is abolished. For von Bortkiewicz, every commodity "relates to itself" so as to "measure" its value. In turn, each commodity is to become its "own equivalent" reflecting by itself, its value.

Von Bortkiewicz does not realize that he is arguing that value (of a "good") is the measure of value. "A piece of tautology" -to use Marx's words, that neither expresses value nor magnitude of value. It would amount to say that

20 yards of linen = 20 yards of linen,

as we saw before.

Von Bortkiewicz never took notice of Marx's repeated warnings that the commodity serving as a measure of value has not got any quantitative determination of value. Von Bortkiewicz could argue, however, that he was operating with empty indexes, numéraires, and not with magnitudes of social substance as in Marx.

## A. S U P P L E M E N T A R Y      N O T E S

### I. The "good": "absolute value" proportional to value - "the index"

#### a. Proudhon and Dühring

As far as "the so-called 'absolute value'" is concerned, it has been advanced by von Bortkiewicz as a quotation of Marx without source. It looks as if such quote, by itself, was somewhat obscure. In an attempt to find the trail in connexion with the "so-called 'absolute value'" let us first turn to Proudhon and Dühring, known to us through the criticism by Marx and Engels of them, to see if they are of any help to us.

Let us start with Proudhon and his "constituted value".

"What then is this 'constituted value' which is all M. Proudhon has discovered in political economy?

Once utility is admitted, labour is the source of value. The measure of labour is time. The relative value of products is determined by the labour time required for their production. Price is the monetary expression of the relative value of a product. Finally, the constituted value of a product is purely and simply the value which is constituted by the labour time incorporated in it.

Just as Adam Smith discovered the division of labour, so he, M. Proudhon, claims to have discovered 'constituted value'. This is not exactly 'something unheard of,' but then it must be admitted that there is nothing unheard of in any discovery of economic science. M. Proudhon, who appreciates to the full the importance of his own invention, seeks nevertheless to tone down the merit thereof 'in order to reassure the reader as to his claims to originality, and to win over minds whose timidity renders them little favourable to new ideas.'" (Marx, 1978, p.38)

For Proudhon, the "constituted value of a product is purely and simply the value which is constituted by the labour time incorporated in it"; which [in von Bortkiewicz's words] is identical with the quantity of labour employed in its production". Hence, "the so-called 'absolute value'".

We can see that in spite of the difference in name, the so-called "absolute value" is nothing unheard of in economics. It denotes an assimilation rather of Proudhon than of Marx -if the criticized is



not taken for the critic.

But once more, allow us to draw a parallel between Herr Dühring and von Bortkiewicz:

"Herr Dühring has discovered a very gross schoolboy howler in political economy in Marx which at the same time contains a socialist heresy dangerous to society.

Marx's theory of value is 'nothing but the ordinary...theory that labour is the cause of all values and labour-time their measure. But the question of how the differential value of so-called skilled labour is to be conceived is left in complete confusion...It is true that in our theory, too, only the labour-time expended can be the measure of the natural cost of production and therefore of the absolute value of economic things; but here the labour time of each individual must be considered absolutely equal to start with, and it is only necessary to be on guard where the separate labour-time of the individual in more skilled production receives a contribution from the labour-time of other persons...for example, in the tool used.'" (Engels, 1976, pp.251, 252; emphasis added)

For Dühring "only the labour-time expended can be...the absolute value of economic things; but here the labour time of each individual must be considered absolutely equal to start with,". Hence, "absolute value" of an economic thing is the "absolute" labour time expended. Further, there is a correspondence between values and "absolute value" both in Dühring and, for the same token, in Marx.

What is Engels' answer to Dühring in relation to the so-called "absolute value"? In referring to Marx's Capital, Vol. I, Chapter I, and in particular to the reduction of skilled to unskilled labour, Engels states:

"First of all, Marx is here dealing only with the determination of the value of commodities, i.e., of objects which, within a society composed of private producers, are produced and exchanged against each other by these private producers for their private account. In this passage, therefore, there is no question whatever of 'absolute value' -whatever regions it may haunt- but of value which is current in a definite form of society." 1/

But at this stage, let us remember that von Bortkiewicz did provide us with an answer as to whence "absolute value" 2/.

Referring to "absolute value", Engels adds:

"Because of his [Dühring's] complete confusion he mistakes the value of commodities, which Marx was alone occupied in the first instance, for 'the natural cost of production', which makes the confusion still worse confounded, and even for 'absolute value', which to our knowledge has nowhere had currency in political

1 Engels, 1976, p. 253

2 "As a rule, however, Marx uses the word 'value' by itself, even when he has absolute value in mind, (e.g. in Das Kapital, I, pp.6-7)." (von Bortkiewicz, 1952, p.5n)

economy up to now. But whatever Herr Dühring may understand by the natural cost of production, and whichever of his five kinds of value may have the honour to represent absolute value, this much at least is sure: Marx is discussing none of these things, but only the value of commodities; and in the whole section of Capital dealing with value there is not the slightest indication of whether or to what extent Marx considers this theory of value of commodities applicable also to other forms of society." <sup>3/</sup>

Instead of referring to Marx when speaking of the so-called "absolute value", von Bortkiewicz ought to have known that his own tenets reflect close coincidence with Proudhon and Dühring, rather than with Marx. Von Bortkiewicz was free, in any case, to claim that Marx was simply repeating Proudhon's and Dühring's notion of value. Either he was not acquainted with them, or he is grossly misinterpreting Marx.

b. Incogitancy of "absolute value"; indeterminacy of value -an "index"

Returning to von Bortkiewicz, a "commodity" -being considered in its isolation- "is identical with the quantity of labour employed in its production". <sup>4/</sup> Whatever that quantity in a single commodity divorced from and excluding the rest of them might be, he claims that it exists within it, precluding any comparison with any other of its kind.

It could be said that "absolute value" is an arcanum in so far as each commodity presumably possesses its own quantity. In such a way, von Bortkiewicz has built for himself a barrier to determining the so-called "absolute value". <sup>5/</sup> But at this point, von Bortkiewicz has turned the tables on himself by stating that "the values of different goods bear the same proportion to each other as their absolute values, and this proportionality...holds good for any measure of value."

He has managed to put forward in a dexterous way, that "absolute value", viz., labour time turned into an absolute,

i) is an unknowable unknown in so far as it accrues to a commodity in its individuality, excluding the rest, i.e., in its isolation;

<sup>3</sup> Engels, 1976, p. 254.

<sup>4</sup> In a word, a commodity is identical to itself, i.e., a commodity is a commodity. A truly far reaching discovery.

<sup>5</sup> The aberrancy of this tautology is confirmed when he claims that such "absolute value" holds for any a commodity excluding all the rest. In doing so, he is also excluding the very commodity he claims to be considering.

ii) cannot be determined as it expresses itself through an index which includes all the "goods" in their relation to each other. Furthermore, that "proportionality" holds in whatever case.

As von Bortkiewicz asserts that value is mere indexes without knowable content, i.e. "absolute value", likewise such indexes ought to reflect their incogitant denomination. And that, nevertheless, "proportionality" between such indexes and their incogitant denomination prevails.

If he, as a quantitatively precise man, had the accurate precision -which he lacked- of expressing his propositions in the form of theorems -albeit devoid of proof, he would have claimed that:

It is possible to operate with indexes by rendering their respective bases, which are presupposed excluding each other, non-comparable among themselves. Moreover, each index will be proportional to its respective bases, and this holds good for any index taken as a base.

But the analogy with statistics stops here.

As far as political economy is concerned, we saw at the beginning of this work, how Marx refers to Proudhon's very ideas of proportionality, value, and the so-called "absolute value". The reasons for Proudhon having been optimistic in his economic outlook at all times -as we saw earlier- is based on a presupposed forecast, shared by von Bortkiewicz precisely in a form which Marx exposes:

"We now come to a new definition of [Proudhon's] 'constituted value'.

'Value is the proportional relation of the products which constitute wealth.'" (Marx, 1978, p.53)

As we can see, Proudhon, Dühring and von Bortkiewicz share the same tenet. They preach proportionality between the so-called "absolute value" -designated by Proudhon as "constituted value"- and value.

### c. Proportional dualism in Proudhon and Walras

Let us take Walras into consideration, as we regard his notions of value.

Walras himself, explicitly reluctant to embrace Proudhon in the "Poverty of Philosophy" or Bastiat's propositions in his Harmonies



économiques, elects for a restatement of Bastiat,<sup>6/</sup> to find out that he was just upholding the same ideas of modern salesmanship that both as enlightened advocates of free-trade displayed.

Let us intrude in Walras' Elements of Pure Economics:

"Current prices or equilibrium prices are equal to the ratios of the raretés"

In other words:

Values in exchange are proportional to the raretés."  
(Walras, 1954, p. 145)

And what is "the raretés"?

"Value in exchange, like weight, is a relative phenomenon, while rareté, like mass, is an absolute phenomenon." <sup>7/</sup>

6 "In his Contradictions économiques Proudhon argued that there is a conflict between justice and material well-being. Bastiat in his Harmonies économiques defended the opposite thesis. I think that neither proved this point. I shall take up Bastiat's proposition again and defend it in a different way." (Walras, 1954, pp.79,80)

7 Walras, 1954, p. 145. Truly inventive man is M. Walras. His own analogy of "phenomenical" physics constitutes an "illustration" that the universe is static, while pure equilibrium reigns eternally. He simply considers weight as it appears on the needle of the scales, i.e., as accounting weight, moreover devoid of standard. In spite of having attended the École des Mines, and perhaps for having left it in good time before he finished, he did not understand how the measure of gravity, for instance the gramme, is transformed into the standard of weight. Therefore, he naively supposes that the particular quantity of mass which serves as a unit of measure is, as a measure, related to mass as such -hence "absolute" mass, and not to other quantities of mass. In so far as for the hawker the physical objects appear to be extents of the same denomination as a result of the conversion of their quantity of mass into weights, Walras denies the existence of the characteristic feature of measure, i.e., gramme, which reduces the physical objects to the same denomination. And since in this comparison of different quantities of mass, the quantity of mass which serves as standard is conventionally established, Walras denies that it should be established at all and decrees, without supplying any proof, that weight is a purely "relative phenomenon". In other words, that 50 kilograms of iron for Peter is not the same as 50 kilograms of iron for Paul, in so far as mass, like "rareté is personal" (Walras, 1954, p.572g). Then, if different objects record in the scale 1 ton, 40 grammes, 80 kilogrammes, then any comparison of their masses, and therefore of its gravity, as well as of its content in grammes would be an irrelevant exercise. Moreover, it would be impossible according to Walras. To such extravagance it must be stated, in contradistinction, that the measure of mass, i.e. gramme, remains, firstly, a qualitatively determined physical object outside us, i.e. iron, and secondly a quantitatively determined portion of mass of such physical object, namely, 50 kilogrammes of iron. But for Walras everything would be expressed in numerical relations of 1,000,000; 40; 80,000; and the numeral one would be established as the sole unit of measurement, while he has abandoned not only ton, kilogramme, gramme, but also what these measures designate, that is to say, iron. The empty abstraction of



For Walras, therefore, prices are values in exchange, which are proportional in a firm quantitative relation to "the raretés". Like von Bortkiewicz, Walras distinguishes between value as an "absolute phenomena", viz., "rareté", and a "relative phenomena", namely, values in exchange. Likewise, value in exchange is an index in an exchange relationship, i.e. "a relative phenomena". Hence, an index is value. In its turn, values are proportional to "absolute values". Finally, values, that is to say prices, is value.

Nobody better than von Bortkiewicz to engage himself in enunciating the same groundless forecast of proportionality in "goods" once more, while he merely re-exposes the unsubstantiated wisdom of Proudhon and Walras.

It constitutes a false attribution to state that such a proportionality between value as a measure of value -a circumlocution- and "absolute value" -a tautology-, "constitutes the substance of the Marxian Law of Value". This is simply because von Bortkiewicz took Proudhon for Marx.

Hence, von Bortkiewicz's ability and success might rest in an expression of proportionality, is after all the only abstract numerical proportion. As far as his examples go, the analogy with economics disproves his "absolute value" (or "rareté"), while his physical analogy proves nothing at all. He takes good care not to mention gravity here, while at the same time he denies implicitly the units of weight as general equivalents, i.e., gramme, ounce, that they are. On discovering the "absolute" mass and the "relative" weight, he has carried out the Herculean labours of eliminating universal gravitation and therefore emptying the universe of that which it is constituted, matter in movement -if I am allowed the redundancy. In fact, Walras and Dühring propounded with the same absence of proofs the "absolute" mass, devoid of energy, and hence the cosmic "general equilibrium". However, in contradistinction with Walras, Dühring -as quoted by Engels- showed inability to find a lucid interval:

"'But if we had conceived the so to speak (!) motionless equilibrium on the model of the concepts which are accepted without any particular objection (!) in our present-day mechanics, there would be no way of explaining how matter could have reached the process of change.' But apart from the mechanics of masses, there is also, we are told, a transformation of mass movement into the movement of extremely small particles, but as to how this takes place -'we have no general principle for this at our disposal up to the present and consequently we should not be surprised if these processes end somewhat in the dark.'" (Engels, 1976, p. 67)

While Walras shares the obscurantism of Dühring in a polite and implicit form, there is no problem of starting off the universe for him. He makes out of the individual a demiurge, while everything is to remain static. But let this lengthy observation suffice as this is not the place to repeat the very rudiments of elementary physics. Far less for vulgarizing Kepler or Newton.

the fact that he performed an act of substitution, whereby Marx is presented by him as holding the very foundations shared by bourgeois economists. And it is on this footing that he erects his objections to Marx.

After proportionality between the so-called "absolute value" and value has been proposed, the "general (economic) equilibrium" -its euphemism-, follows suit. Proudhon is most illustrative for us, as his "constituted value" is a proportional synthesis of the labour-time employed in it alone on the one hand, and on the other, of its "rareté". In other words, he held that both imaginary quantities ought to be in a reciprocal relation. That is to say, he was embracing the tautological content that was to appear "separately" by Walras, on the one hand, and of von Bortkiewicz and Dühring on the other.

"What M. Proudhon gives as the consequence of marketable value determined apriori by labour time could be justified only by a law couched more or less in the following terms:

Products will in the future be exchanged in the exact ratio of the labour time they have cost. Whatever may be the proportion of supply to demand, the exchange of commodities will always be made as if they had been produced proportionately to the demand. Let M. Proudhon take it upon himself to formulate and lay down such a law, and we shall relieve him of the necessity of giving proofs. If, on the other hand, he insists on justifying his theory, not as a legislator, but as an economist, he will have to prove that the time needed to create a commodity indicates exactly the degree of its utility and marks its proportional relation to the demand, and in consequence, to the total amount of wealth. In this case, if a product is sold at a price equal to its cost of production, supply and demand will always be evenly balanced; for the cost of production is supposed to express the true relation between supply and demand.

Actually, M. Proudhon sets out to prove that the labour time needed to create a product indicates its correct proportional relation to needs, so that the things whose production costs the least time are the most immediately useful, and so on, step by step." (Marx, 1978, p.55)

In other words, why are products of private and independent labour not directly social products? Why do they have to become products of labour directly social in the process of exchange? Why do they have to prove that they are useful, i.e. that they are use-values? Why is the value of commodities determined by the socially labour time, according to Marx, and not as von Bortkiewicz claims, by "the so-called 'absolute value' of a commodity, which is identical with the quantity of labour employed in its production"? Why are commodities not goods, neither the goods commodities? Why is production not consumption? Instead of taking into consideration these problems,

von Bortkiewicz resorts to the panacea of proportionality, while he compels and even "makes his people go out for a walk in order to ensure them fine weather."

We have seen how von Bortkiewicz's procedure exposes one ambiguity after another, and how his propositions, apart from not being proven, are not the result of any analysis. So far, they have constituted a series of assertions devoid of proof.

Later on, we saw how Proudhon and Dühring refuted at length by Marx and Engels, purport the same proportionality between value as an index made identical to prices, and the so-called "absolute value", put forward commonly with them by Walras.

After the exposure of tautologies that von Bortkiewicz presents plus the analogy we have made of him with other bourgeois economists, we will highlight specific differences between the above mentioned and Marx, not in order to undertake popularisation, but to pursue further our examination of von Bortkiewicz.



2. The commodity: use-value and value (substance of value, extent of value)

Marx himself refuted the imputation of the "multiple significance of the concept of value" that was ascribed to him in the late 1870's by Adolph Wagner. Notwithstanding, it constitutes the spring via which von Bortkiewicz saw the so-called "absolute value", after substituting the extent and substance of value by an index. "Absolute value" was in its turn to take the place of use-value by denying the material qualities of the commodities, which condition the utility of the object. That was why von Bortkiewicz could replace the commodity in order to talk of "goods" in the course of his exposition.

Let us see how Marx answers the multiplicity of von Bortkiewicz's interpretations of him, i.e., of "the multiple significance of the concept of value":

"All this is 'drivelling'. In the first place De prime abord I do not start out from 'concepts', hence I do not start out from 'the concept of value', and do not have 'to divide' these in any way. What I start out from is the simplest social form in which the labour-product is presented in contemporary society, and this is the 'commodity'. I analyse it, and right from the beginning, in the form in which it appears. Here I find that it is, on the one hand, in its natural form, a useful thing, alias use-value; on the other hand, it is a bearer of exchange-value, and from this viewpoint it is itself 'exchange value'. Further analysis of the latter shows me that exchange-value is only a 'form of appearance', the autonomous mode of presentation of the value contained in the commodity, and then I move on to the analysis of the latter. Hence this means precisely, p. 36, 2nd. edn: 'When at the beginning of the chapter it was said in the traditional way: the commodity is use-value and exchange-value, then this was, strictly speaking, false. The commodity is use-value or a useful object, and 'value'. It is presented as double what it is, as soon as its value possesses a form of appearance proper, that of exchange-value, different from its natural form' etc. See Cap. i.30-1 Hence I do not divide value into use-value and exchange-value as antitheses into which the abstraction 'value' splits, rather I divide the concrete social form of the labour-product; 'commodity' is, on the one hand, use-value, and on the other hand, 'value', not exchange-value since the mere form of appearance is not its proper content.

Secondly: Only an obscurantist, who has not understood a word of Capital can conclude: Because Marx, in a note to the first edition of Capital, overthrows all the German professorial twaddle on 'use-value' in general, and refers readers who want to know



something about actual use-value to 'commercial guides', 23/ -therefore use-value does not play any role in his work. Naturally, it does not play the role of its opposite number, of 'value', which has nothing in common with it, other than that 'value' appears in the term 'use-value'. He could just as well have said that 'exchange-value' is put aside by me, because it is only the form of appearance of value, but not 'value', since for me the 'value' of a commodity is neither its use-value nor its exchange-value.

23 The reference to Marx's A Contribution to the Critique of Political Economy published in 1859 as the first instalment on Capital; parts of this work were revised and incorporated into Capital I (1867). Marx has slightly misquoted the term 'commercial advice' ('Anweisungen zur Warenkunde') as 'commercial guides' ('Anleitungen zur Warenkunde') (MEW xix, 369, 582 cf. Karl Marx, Zur Kritik der politischen Ökonomie (Berlin, 1859), 4n; CCPE 28.)" (Marx, 1975, pp. 198,199)

As von Bortkiewicz has supplanted the use-value by the so-called "absolute value", an index is contrived as a reflex of "absolute value". At the same time, he has disposed of the substance and extent of value of the commodity; in its turn replaced -in him- by "goods." Therefore, for von Bortkiewicz, as for Wagner -whom Marx was criticizing above, any one "good" is "absolute value" proportional to indexes under the name of values, derived from the "concept" of "absolute value". This is in contradistinction to Marx's analysis whereby use-value and value are derived from the "most simple social form in which the product of labour" is embodied in contemporary society, i.e. commodities; in which the contradiction between value and use-value is revealed as two-fold contradictory factors, i.e. use-value and value which constitute the two factors of the commodity.

#### a. Its contradistinction with the "good"

In deriving value from the commodity, Marx gives a caveat, a warning, a caution against the appearance of value on the one hand, as if it were just an index, i.e. purely relative, or, on the other hand, something intrinsic, something innate or absolute. In other words, the caveat is precisely against the multiple significance of the concept of value of commodities:

"Exchange-value appears as the quantitative ratio or proportion in which Use-values of one sort are exchanged for Use-values of another sort (f) -a ratio which continually varies with time and place. Exchange-value would seem, then, to be something fortuitous and purely relative, and the innate Exchange-value of a commodity (its 'intrinsic' value) a contradictio in adjecto.(g) Let us look at this matter more closely.

A certain commodity - a quarter of wheat for example, is exchangeable with x blacking, or with y silk, or with z gold, etc., -in short, with other commodities in different proportions. The wheat has thus several Exchange-values instead of one. But as either x blacking, or y silk, or z gold, is the Exchange-value of one quarter of wheat, the x blacking, y silk and z gold, must be interchangeable one with the other, or in other words, must be of equal Exchange-value. It follows therefore, firstly, that the valid Exchange-values of a commodity express an equality; and secondly, that the Exchange-value of a commodity can generally be only the mode of expression, the 'phenomenal form,' of a commodity of a nature distinct from itself.

(f) 'Value consists in the Exchange-ratio which exists between a certain thing and a certain other thing, between a given quantity of one thing and a given quantity of another.' Le Trosne, De l'Interet Social, (Paris, 1846), p. 889.

(g) 'Nothing can have an intrinsic value.' N. Barbon, l.c.p.16.  
Or as Butler has it- 'The value of a thing  
Is just as much as it will bring!'

(Marx, 1908, pp.2,3)

For vulgar economics<sup>1/</sup> a sole commodity, -and therefore each isolated commodity, is the measure of its own value.<sup>2/</sup> As if it was something springing off from its depths, something intrinsic. That is why its propounders speak of "the so-called 'absolute value'" of a commodity identical to itself. Needless to say that they forget to speak out how do they found it. For instance, it is as much pleading to speak of Marx's "mind" in the case of von Bortkiewicz as it is in Walras' case, when he states that

"30. Value in exchange is thus a magnitude, which, as we now see, is measurable. If the object of mathematics in general is to study magnitudes of this kind, the theory of value in exchange is really a branch of mathematics which mathematics have hitherto neglected and left undeveloped." (Walras, 1954, p.70)

1 "Once for all I may here state that by classical political economy, I understand that economy which, since the time of W. Petty, has investigated the real relations of production in bourgeois society, in contradistinction to vulgar economy, which deals with appearances only, ruminates without ceasing on the materials long since provided by scientific economy, and there seeks plausible explanations of the most obtrusive phenomena, for bourgeois daily use, but for the rest, confines itself to systematizing in a pedantic way, and proclaiming for everlasting truths, the trite ideas held by the self-complacent bourgeoisie with regard to their own world, to them the best of all possible worlds." (Marx, 1918, p.93n)

2 "if he [an observer] should see the price of wheat double from one year to the next without any remarkable variation in the price of most other articles or in their relative values, he would attribute it to an absolute change in the value of wheat, even if he did not know that a bad grain harvest had preceded the high price." (Cournot, 1897, p.22)

Let us investigate more closely Walras' profound analysis of the mathematics of "value in exchange" -of mathematics, as we proceed to find any further similarity which he might have with von Bortkiewicz.

Aside from making a quid pro quo between mathematics and political economy, Walras shares an assumed proportionality, as seen before. He does not know if he is referring to commodities or to goods, or even to something else. Even if he knew, his omission proves that it was either irrelevant or redundant, for him. Further, he does not distinguish between an index (or numéraire), extent or magnitude of value, and its measure, while he asserts the result of his findings: his value in exchange is an index which is a magnitude which is measurable. Let us examine his proposition above in some detail.

"29. Wheat is worth 24 francs a hectolitre. We observe, now, that this phenomenon is mathematical in character as well. The value of wheat in terms of money, or the price of wheat, was 22 or 23 francs yesterday. A short while before it was 23 francs 50 centimes or 23 francs 75 centimes. Tomorrow it will be 25 or 26 francs. But at this present moment, today, it is 24 francs, neither more nor less. This phenomenon is so clearly mathematical in character that I shall proceed immediately to state it in terms of an equation and thereby give it its true expression."  
(Walras, 1954, pp.69,70)

All these unnecessary and trivial reminiscences of Walras, in registering for us the minutiae of the price lists in the market place is simply to tell us here that the value of commodities is purely fortuitous and purely accidental, existing nowhere outside of his insistent observations <sup>3/</sup>. It looks as if his utmost precision to register the reported oscillations has precluded him from reaching here any further consideration, while he stamps the label of mathematical rigour per se on it. Also, let us observe that here, Walras claims that the price of a commodity is its value expressed in terms of money.<sup>4/</sup>

<sup>3</sup> "'Wheat is worth 24 francs a hectolitre.' This is how the phenomenon of value in exchange makes its appearance." (Walras, 1954, p.69); "Thus value in exchange remains essentially a relative phenomenon" (Walras, 1954, p.178). "This only means that we cannot make any comparisons between values from place to place or from time to time, but that does not preclude us from comparing them with one another and measuring them at a given place and at a given moment." (Walras, 1954, p.187)

<sup>4</sup> Elsewhere, he confirms himself thus

"This particular value of wheat in terms of money, that is to say, this price of wheat, does not result either from the will of the buyer or from the will of the seller or from any agreement between the two." (1954, p.69; emphasis added)



To Walras' economic characterisations in "mathematics", we proceed next.

"The hectolitre being taken as the quantitative unit of measure for wheat, and the gramme as the quantitative unit measure for silver, we can say with utmost precision that, if 5 hectolitres of wheat are exchanged for 600 grammes of silver, it means that '5 hectolitres of wheat have the same value as 600 grammes of silver', or that 'the value in exchange of 5 hectolitres of wheat equals the value in exchange of 600 grammes of silver', or finally, that '5 times the value in exchange of 1 hectolitre of wheat equals 600 times the value in exchange of 1 gramme of silver'.

Accordingly, let  $v_b$  be the value in exchange of 1 hectolitre of wheat and let  $v_a$  be the value in exchange of 1 gramme of silver 0.900 fine. Using ordinary mathematical notations, we obtain the equation:

$$5 v_b = 600 v_a,$$

and if we divide both sides of the equation by 5, we obtain

$$v_b = 120 v_a. \quad \dots(1)$$

If we agree to conform to the practice of this hypothetical market selected for our example, and choose as the unit of measure of value, not the value in exchange of 1 gramme of silver, but the value in exchange of 5 grammes of silver 0.900 fine, called a franc, that is to say, if we postulate that

$$5 v_a = 1 \text{ franc},$$

it follows that

$$v_b = 24 \text{ francs}. \quad \dots(2)$$

In form (1), precisely as in form (2), the equation is an exact translation of the following phrase, or as I should prefer to put it, the scientific representation of the following fact:

'Wheat is worth 24 francs a hectolitre.' (Walras, 1954, p.70) 5/

What has Walras demonstrated above? Let us make a few observations on Walras' most original mathematical ponderings. For instance, he exposes that he is thoroughly confused between the material which serves as expression of value of both commodities he happens to be dealing with, and the value of the commodities themselves

5 "9. Let  $p_1, p_2, p_3$ , etc.,

be the values of certain articles, with reference to a gram of silver; if the standard of value is changed and a myriagram of wheat is substituted for the gram of silver, the values of the same articles will be given by the expressions

$$\frac{1}{a} p_1, \frac{1}{a} p_2, \frac{1}{a} p_3, \text{ etc.,}$$

a being the price of the myriagram of wheat, or its value with reference to a gram of silver. In general, whenever it is desired to change the standard of value, it will suffice to multiply the numerical expressions of individual values by a constant factor, greater or less than unity" (Cournot, 1897, pp.22,23)



-which are to be indistinctly represented by  $v_a$  and  $v_b$ . In other words, he takes wheat for its value, and the value of silver for silver itself.

Once he has confused the value of wheat with wheat itself, and having taken silver for its value; once he makes wheat and silver, each, its quantitative unit of measure, he is making, in consequence, the value of wheat the measure of value of wheat. Likewise, the value of silver is made the measure of value of silver. In other words, value is for him, the measure of value.<sup>6/</sup>

How does he confirm this lack of determination; these whimsical values of his, which are as tautological as they are devoid of any regulation whatsoever? By spelling it out for us:

"What are  $v_a$ ,  $v_b$ ,  $v_c$ ,  $v_d$  ... ? They are really nothing but indeterminate, arbitrary terms that have meaning only in their proportionate relationship to one another." (Walras, 1954, p.178)

Therefore, in his theoretical deprivation he makes wheat, silver, their value as commodities and the measure of their value, sheer arbitrary terms avoiding determination at all costs. Aside of their relative expression as pure relative indexes to one another, they are meaningless for him. This, he confirms as follows:

"For the analogy between value and length to hold, and for it to be possible to measure a given value, say the value of a hectolitre of wheat at a given moment and given place, as length is measured, it would again be necessary to refer to three things: the value of a hectolitre of wheat, the value of a half-decagram of silver 0.900 fine and the ratio of the first value to the second, which would be the measure required 7/. But of these three things, two are non-existent, the first and the second. Only the third exists. Our analysis has demonstrated perfectly that value is essentially relative." (Walras, 1954, pp. 187,188)

As can be seen, Walras is determined to undo himself, quite explicitly. He has confirmed that value is but a pure ratio he observes when commodities are given for one another.<sup>8/</sup> As a result,

6 "So far as values are concerned, they are self-measured, since the ratios of these values are found immediately in the inverse ratios of the commodities exchanged." (Walras, 1954, p.188) In the same breath, he could have concluded from this profound circumlocution, that the value of the unknown (i.e.  $v_a$  and  $v_b$ ) is the unknown itself.

7 The rectangular parenthesis has been added by W. Jaffé. Unfortunately, Jaffé has not understood Walras, for whom a measure is not required. Walras explicitly does away with what he is attempting to measure.

8 "10. To sum up, there are only relative values; to seek for others is to fall into a contradiction with the very idea of value in exchange, which necessarily implies the idea of a ratio between two terms." (Cournot, 1897, p.24)

and following Walras, in such an inward "market", everything is to be expressed in the form of numerical ratios, i.e. 24,  $1/24$ , 5,  $1/5$ , 120, etc.; following his earlier example. Meanwhile the numeral one is decreed as the sole quantitative unit of measure. Therefore, it is ludicrous, according to Walras, to speak of 24 francs, 1 franc; in so far as he abandons not only silver, but also its legal designation:

"Hence there is no such a thing as the rareté or the value of a half decagram of silver 0.900 fine; and the word franc denoting a standard of value  $9/7$  is the name of a thing which does not exist." (Walras, 1954, p.188) 10/

Therefore, if he was to be coherent within his own assumptions, he should have said: one "equals" or "is" twenty four, 11/ for instance.

Walras confirms 12/ that he can pose a value "equation", not to mention its solution, by means of two unknown values, as he forgets his own assumptions:

"In the language of mathematics one equation cannot be used to determine two unknowns." (1954, p. 425)

Meanwhile, he has destroyed his own tautology above, as franc

"is the name of a thing" which he manages to make disappear.

And which once (or twice) upon a time, he has used to express the value of commodities. This leaves his putative expression of value, alongside his theory of prices, void. We must marvel at the superiority with which Walras manhandles money, and in such a fashion that he has left -in the name of "mathematics" and "immediately"-

9 The rectangular parenthesis has been added by W. Jaffé, who misses the point on Walras by claiming that the word franc "denoting a standard of value" (sic) does not exist. On the contrary, it is as a "standard of price" that Walras is at pains to intimate that it does not exist for him. Hence, if Jaffé was to intrude an explication of Walras ideas into his text, it should have read:

"the word franc is the name of a thing which does not exist neither as a measure of value nor as a standard of price, while it denotes -if at all- arbitrary accounting money."

We would only observe further that the English-speaking reader is unlucky, as far as Walras is concerned. It is not only that the Éléments was translated to commemorate the 80th anniversary of its first edition, but that its translator provides extraneous or incorrect points in his capacity as editor.

10 "11. If theory should indicate one article incapable of absolute variation in its value, and should refer to it all others, it would be possible to immediately deduce their absolute variations from their relative variations; but very slight attention is sufficient to prove that such a fixed term does not exist" (Cournot, 1897, p.25)

11 We thoroughly appreciate that he might have had a lot of toil in modifying all the price-lists -among other things- to suit his "scientific representation".

12 We are still referring to his "mathematical" characterisation.

not the slightest trace of it.

But Walras is not quite satisfied either with his essays in legerdemain or with his marketable tautologies. Let us further see how he proceeds. We have already observed that for him such and such a commodity isolated from all the rest is the measure of value itself. But if each commodity is the measure of value itself, how can they be exchanged? That is to say, how is that they can possibly have exchange value if they just refer "intimately" to themselves? On what grounds can Walras whisper:

"We have just intimated that useful things limited in quantity are valuable and exchangeable" ? (Walras, 1954, p.87)

Far from providing a resolute and open answer, he simply reinforces his "mathematical" edifice, as he states:

"Prices, or ratios of values in exchange, are equal to the inverse ratios of the quantities exchanged.

The price of any one commodity in terms of another is the reciprocal of the price of the second commodity in terms of the first." (Walras, 1954, p.87) 13/

In spite of this tautological proclamation, we find in

13 For an example of how Walras is truncated, see Arrow & Hahn (1971, p.7):

"Suppose for the moment that there are only two commodities, say 1 and 2. Because of homogeneity, demand and supply are determined [sic] by the ratio of the price of commodity 1 to that [price] of commodity 2, that is, the price of commodity 1 to that [price] of commodity 2 as numeraire ; and by the ratio of the price of commodity 2 to that price of commodity 1, as numeraire . From Walras' law [should read: Theorem], [general economic] equilibrium on market 1 ensures equilibrium on market 2 ; likewise, equilibrium on market 2 ensures equilibrium on market 1 . Partial equilibrium analysis of market 1 is, in the case of two commodities, fully equivalent to general [economic] equilibrium analysis ; partial equilibrium analysis of market 2 is, in the case of two commodities, fully equivalent to general economic equilibrium analysis ." (repeated elsewhere with insignificant alterations; cf. Arrow, 1968, p.386)

Hence, general economic equilibrium analysis is an analysis in general equilibrium in economics. The fragmentary exposition of Arrow & Hahn attempts to present as a deduction what is but a sheer circular argument. To claim that "demand and supply" are determined by the ratio of the price of commodity 1 to that [price] of commodity 2" (emphasis added), amounts to saying that the prices of the ratio are "determined" by supply and demand. Things would not improve if the authors were to claim that it is  $p_2/p_1$ , instead. Or -as they implicitly claim-, that it is  $p_1/(p_2/p_2)$ , i.e. "the price of commodity 1 with commodity 2 as numeraire." Far worse, if they were to take  $p_1$  for their belittled market as a whole (i.e., a one "good" market); and



Walras (as in von Bortkiewicz) that value has very different prices and consequently as many different values, corresponding to as many different measures of value as there are commodities. Hence, "prices is the value."

We have already enunciated a corresponding theorem implicitly advanced by von Bortkiewicz:

For  $n$  "goods" there will be as many as  $n(n)$  "value-indexes" of exchange depending on the  $n^{\text{th}}$  "good" serving as a measure of value. Values are axiomatically identical to prices.

Now let us turn to Walras' theorem of general economic equilibrium to see if it corresponds to the aforementioned.

likewise with  $p_2$ . For a truly concise repetition of this commonplace, see Stonier & Hague (1972, p.11):

"The price of anything is the rate at which it [anything] can be exchanged for anything else."

Hence, the price of "anything else" is reciprocal to "the price of anything", i.e. the rate -and vice versa. Hence, a commodity is either anything or anything else, i.e. anything. Nevertheless, the reader might ask what is this "homogeneity" which has been the cause of so much wrong doing and impairment by Arrow and Hahn? Let the two popularisers again spell it out for us:

"These four assumptions are often made by economists and technical terms have been coined to describe them. In technical language the assumptions are: 1. Homogeneity; [etc.]" (Stonier & Hague, 1972, p.13) What they call "homogeneity" is put as follows:

"First, we shall [build up a model of a hypothetical market for a commodity]. We shall call it a cotton market, though it is unlikely that any actual cotton market will correspond to this simple model. We shall make several simplifying assumptions, viz., assume that every bale of cotton offered for sale is of the same quality, so that there can be no price difference because some bales of cotton are better or worse in quality than others." (1972, p.12)

Professors Stonier and Hague do not realise the beauty of what they call "homogeneity". They supplant different commodities by one kind of commodity. And as if this was not enough, they further replace one kind of commodity, i.e. cotton, with a unique and isolated "quality" of cotton, of which even an arbitration committee of the Cotton Exchange -not to mention any dealer- would be suspicious, not to say distrustful in spite of the "fibre" they claim to expose. They are joined by Professor Meade's accomplished weaving in the subject, as

"A perfect market for any one of the products in the Shops (or for any one of the factors of production in the Firms or Farms) implies:

...(iii) that each product (or factor) is a standardized homogeneous entity so that there is no difference between one unit and another unit of the same product (or factor);" (1965, pp.29,30)



aa. The Theorem of General Economic Equilibrium

"145. The theorem of general equilibrium in the market may be stated in the following terms:

When the market is in a state of general equilibrium the  $m(m-1)$  prices which govern the exchange between all possible pairs drawn from  $m$  commodities are implicitly determined by the  $m-1$  prices which govern the exchange between any  $m-1$  of these commodities and the  $m$ th." (Walras, 1954, p. 185)

Walras should have remembered his very own assumptions. According to his inexorable equilibrium between supply and demand, for  $m$  commodities there ought to be  $m(m)$  numéraire prices,  $m(m)$  numéraire values,  $m(m)$  measures of value. No substance of value. No extent of value, nor their exclusive expression in monetary language, vulgo price, is admitted. This is, of course, before he starts gratifying his readers with his unrequested "intimations".

Leaving aside private affairs, why is it that Walras asserts that finally there will be only " $m-1$ /numéraire" prices" and not  $m(m)$  ? Simply, because he presents himself as the one, as the demiurge -to understate the case-, and also that he was the only soul in the universe. In an exegesis of self-exaltation, he forgot even his own assumptions. To be fair, his own fellow consumers have as much right to express their "intimations" just as much as he does. It is neither just nor rational to dismiss them (including Walras himself) beforehand. But we are afraid that he will proceed with his pattern of including fellow "alms" (to use his words<sup>14/</sup>) out.

"The fact that man's will is cognitive and free makes it possible to divide every entity in the universe into two great classes: persons and things. Whatsoever is not conscious of itself and not a master of itself is a thing. Whatsoever is conscious of itself and master of itself is a person. Man, being both self-conscious and self-directing, is a person. Man alone is a person; minerals, plants and animals are things." (Walras, 1954, p.62)

Before we proceed, let us allow him to juxtapose explicitly his trepidatory intimations along with his universal classification.

aaa. A corrected restatement

Above, Walras has not only expressed the Theorem of General Economic Equilibrium, which is a major component of his

14 Walras, 1954, p. 420.

historical contributions. Simultaneously, he has also systematized in a grandiose manner all that surrounded him. In order to expose to the full the transcendence of both statements, let us substitute this Theorem in his own "fact".

The fact that my (Walras') will is cognitive and free makes it possible to divide every entity in the universe into two great classes; I (Walras) and things. Whatsoever is not as myself conscious of myself and master of myself is a thing. I (Walras) that am conscious of myself and master of myself am a person. I (Walras) being both self-conscious and self-directing, am a person. Walras alone is a person; minerals, plants and animals are things.<sup>15/</sup>

After this enlightened ubiquity in search of consistency for Walras, it is left to the reader whether to embrace the practical conclusions that emanate from megalomania, or to further elaborate on mediocrity as its intrinsic virtue.

ab. Duality, ethics and money

Let us return to price -leaving aside his accomplished dexterity in this respect- and see how he defines it while dealing with the "Problem of exchange of two commodities".

"Let us, therefore, retrace our steps and state our observations in scientific terms. We may take any two commodities, say oats and wheat, or more abstractly, (A) and (B). I put letters A and B in parentheses whenever I wish to indicate that these letters do not represent quantities, which are the only things that can be used in equations, but rather kinds or species or, as one might say in philosophical terms, essences."

Let us now imagine a market to which some people come holding commodity (A), ready to exchange part of it in order to procure commodity (B); while others come holding commodity (B), ready to exchange part of it in order to procure commodity (A). Since the bidding will have to start at some point or other, we shall suppose that a broker offers to give up  $n$  units of (B) for  $m$  units of (A) in accordance, let us say, with the closing rate of exchange of the preceding day. This bid will conform to the equation of exchange

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<sup>15</sup> After this there is no doubt that Professor J.R. Hicks is left in an imperious predicament with his adopted lemma: "Reason also is choice" (1974, p.9), if he has to select one of either animal, vegetable or mineral, in so far as the first category is denied as being already occupied. Finally, he is left to brood, it seems, in a lost paradise.

$$mv_a = nv_b$$

in which  $v_a$  is the value of one unit of (A) and  $v_b$  is the value in exchange of one unit of (B).

Let us define prices in general as ratios between values in exchange or as relative values in exchange." (Walras, 1954, p.87)

So at this stage, we are told that commodities (A) and (B) are not quantities. They are claimed to be "essences", moreover, in enlightened "philosophical terms" -both ordinary oats and profane wheat. Therefore, mathematics would be of no avail for Walras representing them.

But Walras exposes a duality. He has told us already that "prices or the ratios of values in exchange" are proportional to the "raretés." This is only to inform us here that the "raretés," in so far as they are "essences" cannot have a quantitative expression. From this premises, it would follow that they cannot have a proportional relation with "prices or the ratios of values in exchange", while he asserts otherwise. The reader would observe that he has abandoned even his own suppositions, while his explicit conclusions do not follow from them.

And Walras goes even further in this duality. While he has decided to "chose as the unit of measure of value ... a franc"<sup>16/</sup>, he is to endow his raretés not only with quantitative virtues -rather preposterously, but he is also to "chose as the unit of measure of absolute value" a "standard measure of intensity of wants or intensive utility":

"I [Walras] shall, therefore, assume the existence of a standard measure of intensity of wants or intensive utility, which is applicable not only to similar units of the same kind of wealth but also to different units of various kinds of wealth." (Walras, 1954, p.117)

While Walras keeps two standards of value, i.e. value replaced by a numéraire (viz., an index) and "absolute value", he claims that when he is using his intensity of wants as standard, he is an artist or a practical scientist. However, when he is trading commodities and hence, using a franc as standard, he is an ethical person, a moral scientist. In his own words:

"19. It will be seen from the foregoing that a fundamental distinction must be drawn in the realm of human phenomena. We have to place in one category those phenomena which are

<sup>16</sup> Walras, 1954, p. 70.



manifestations of the human will, i.e. of human actions in respect to natural forces. This category comprises the relations between persons and things. In another category we have to place the phenomena that result from the impact of the human will or of human actions on the will or actions of other men. This second category comprises the relations between persons and persons. The laws of these two classes of phenomena are essentially different. The object of bringing the human will to bear upon natural forces, that is to say, the object of relations between persons and things, is the subordination of the purpose of things to the purpose of persons. The object of exercising the human will on the will of others, in other words, the object of relations between persons and persons, is the mutual coordination of human destinies.

Translating this distinction into appropriate definitions, I call the sum total of phenomena of the first category industry, and the sum total of phenomena of the second category institutions. The theory of industry is called applied science or art; the theory of institutions moral science or ethics." (Walras, 1954, p.63) 17/

Let us observe that in order to apply his dual standards for accounting value, Walras is compelled to pay with debased francs according to him, i.e. forfeited money, as he prepares himself to enter into an "ethical" deal, disposing of the "5 grammes of silver 0.900 fine called a franc". Moreover, he has debased the franc to nil by means of his own "art", as he can now "establish" its value as he pleases, and solve the "problem" of m-1 prices to be determined.<sup>18/</sup>

For Walras, all "wants" are to be mental, imaginary, a product of the fantasy, as he supplants -like von Borkiewicz, the use-value of the commodities by "absolute value"<sup>19/</sup>. There are no

17 One of his famulus, eager to conceal in him all his minor and major incongruities, justifies his ignorance and illicit practices as follows:

"Leon Walras, having twice failed in the competitive examination to enter the École Polytechnique, found refuge in the École des Mines. Neither the study nor the career of engineering suited the bohemian temperament of this youth. He soon abandoned the École des Mines and turned to literature and journalism; but his first published novels enjoyed no real success." (Jaffé, 1954, pp.5,6)

Certainly, it was his latest published novel who made him famous, through his mathematical novelties.

18 One could not but recall in this connection Mr. Salomon of Miller's The Price, who in his office of president of New York's Appraisers Association "made" such guild of veritable dealers "all ethical". This was notwithstanding the artistic capacity he exercised as a trader in the second-hand furniture industry.

19 "This distinction between value in exchange, which is relative and objective, and rareté, which is absolute and subjective is a rigorous expression of the difference between value in exchange and value in use." (Walras, 1954, p. 178n)

physiological needs for a man like him. His practical science or determination of his standard of raretés, i.e. "absolute value", is a most private and intuitive affair. For him "practical science" is intuition.<sup>20/</sup>

ac. The Theorem of Maximum Utility; "absolute value", a proven imagery

After Walras has exposed his ethical exercise, i.e., "general (economic) equilibrium", albeit mutilated, let us see how he is engaged in his own "scientific practice", as he tries to cope with time.

In referring to the Theorem of Maximum Utility, he states:

"74. The above analysis is incomplete; and it seems impossible, at first glance, to pursue it further, because intensive utility, considered absolutely, is so elusive, since it has no direct or measurable relationship to space or time, as extensive utility and the quantity of a commodity possessed. Still, this difficulty is not insurmountable. We need only assume that such a direct and measurable relationship does exist, and we shall find ourselves in a position to give an exact, mathematical account of the respective influence on prices of extensive utility, intensive utility and the initial stock possessed." (Walras, 1954, p. 117)

But Walras has already informed us that his rareté can undergo no quantitative expression while he has also asserted that it is proportional to his "prices, or the ratio of values in exchange". To elaborate further this conundrum, he is claiming that rareté has no relation to space or time, and needlessto add, no measure at all. In other words, it does not exist. But in the same breath, Walras claims that it is enough to assume that it can be measured; hey presto!, it does exist. Hence the "proof" of "absolute value" or rareté in Walras. The proof of the proof is to imagine what Walras was imagining, i.e. what he had "in mind", as he immediately proceeds from the above:

"I shall, therefore, assume the existence of a standard measure of intensity of wants or intensive utility, which is applicable not only to similar units of the same kind of wealth but also to different units of various kinds of wealth. With this in mind, let us draw two co-ordinate axis, one vertical,  $Oq$ , and the other horizontal,  $Or$ , as in Fig. 11. On the vertical axis  $Oq$ , starting at the point  $O$ , I lay off successive lengths  $Oq^1$ ,  $q^1q^{1'}$ ,  $q^{1'}q^{1''}$ ...., which represent the units of  $B$  which holder (1) would successively

20 As animals have intuition, Walras bars them from being such a thing, i.e. animals. Just in case they exercise their capabilities, and therefore become "artists" or "practical scientists", determining their wants à la Walras.

consume in a certain interval of time if he had these units at his disposal. I am assuming that, during this interval, the utility, both extensive and intensive, remains fixed for each party, which makes it possible for me to include time implicitly in the expression of utility. Were this not the case and had I supposed utility to be a variable functionally related to time, then time would have to figure explicitly in the problem. And we should then have passed from economic statics to economic dynamics. (Walras, 1954, p. 117)

While von Bortkiewicz proves his business of "absolute value" by means of mind reading, i.e. "he [Marx] has absolute value in mind", Walras prefers to mind his own mind, as he tells us above<sup>21/</sup>. But with this defence, "absolute value" hardly needs any refutation.

#### ad. A relentless static analysis

Short of declaring himself Cronos, let us take Walras' word in the above quotation, and see what happens when economic dynamics is "introduced".

If he "introduces" time explicitly, i.e., if he decides that his universe is to become "again" -after he has with his all-mightiness brought it to a halt to "study" it-, he cannot assume any more that his raretés are going to be fixed. On the contrary. From the moment of his artistic exercise of spinning fantasies about what he is going to "consume" to the moment that he consumes it -if he does- his absolute cosmos becomes absolute chaos.

Therefore, he is propounding that the consumer can consume the commodities "in mind" before he purchases them, after which he consumes them afresh. Independently of fabricating an imaginary stage, there is no ground to introduce such elegant curves, of which he has said that they neither exist nor hold anywhere. As soon as he "dynamises" his static system it breaks down exposing a preposterous exercise and the consequences thereof, <sup>22/</sup> both quantitative and

<sup>21</sup> The reader can turn to Walras' graph (1954, p. 118) if there is any interest in a putative refraction of Walras' mind.

<sup>22</sup> We warn the "consumers" about trusting too much the standing of formidable giants of static equilibrium. They are now severely warned that they might come to grief and be tossed "dynamically" into the air, for tilting at windmills sword in hand -or vice versa. Most elucidating in this respect is the proviso advanced by Hicks, informing us where the "dynamic state" relapses:

"The stationary state /i.e., general equilibrium/ is that special case of a dynamic system where tastes, technique, and resources remain constant through time." (1974, p. 112)

This is just after he has disclosed what the "stationary state" is -according to him:

"Although it is my firm belief that the stationary state is, in the



non-quantitative, as "essences" -in "philosophical terms"- that he claims they are.

ae. Proudhon: a synthesis of Walras and von Bortkiewicz

We have observed that Walras just considers "absolute value" as units of "rareté", and makes it coincide with a parabolic curve of imaginary demand for one isolated individual, without reference to time or place, while he turns a blind eye to supply.

Von Bortkiewicz, as Walras' counterpart, just considers "absolute value" as units of "absolute" labour time, which in its turn makes it coincide with a fixed  $45^0$  positive "function", imagining supply ad infinitum, of one isolated individual, without reference to time or place, while he turns a blind eye to demand.

Despite the apparent difference between them, their reflection would appear to be reciprocal. In other words, "absolute" labour time reciprocated by "absolute" utility -or "rareté".

This syncretism was upheld by Proudhon, among others. In this respect, Marx pours scorn on him, as Proudhon proclaims to the world the opposition between use-value and value, producing his "constituted value"; constituted of "absolute" labour time and of units of "rareté".<sup>23/</sup>

"M. Proudhon goes on to develop this antithesis.

'In my capacity as a free buyer, I am judge of my needs, judge of the suitability of an object, judge of the price I am

---

end, nothing but an evasion, nevertheless it has played so large a part in modern economic thought that we must give it some attention." (Hicks, 1974, p. 117)

So much a large a part indeed, that perhaps, with an accomplished legerdemain it becomes a general case:

'Partial equilibrium analysis in contradistinction to partial disequilibrium is to be regarded as a special case of general equilibrium analysis." (Arrow & Hahn, 1971, p. 6)

As could be seen, utter confusion reigns about what is "general" in their own special case. This is because -forsooth as they are, their "essential" claims are ostensibly insubstantial, which they resolutely present as an inventive task to be achieved:

"It is not sufficient to assert that while it is possible to invent a world in which the claims made on behalf of the 'invisible hand' are true, these claims fail in the actual world. It must be shown just how the features of the world regarded as essential in any description of it also make it impossible to substantiate the claims." (Arrow & Hahn, 1971, p. vii)

23 That this fusion does not constitute any novelty is tediously confirmed by the idyllic expression of price by means of barter as illustrated in supposed curves of supply and demand given in any textbook of economics.

willing to pay for it. On the other hand, in your capacity as a free producer, you are master of the means of execution, and in consequence, you have the power to reduce your expenses.' (Volume I, p. 41)

And as demand, or exchange value, is identical with estimation, M. Proudhon is led to say:

'It is proved that it is man's free will that gives rise to the opposition between use value and exchange value. How can this opposition be removed, so long as free will exists? And how can the latter be sacrificed without sacrificing man?' (Volume I, p. 41)

Thus there is no possible way out. There is a struggle between two as it were incommensurable powers, between utility and estimation, between the free buyer and the free producer.

Let us look at things a little more closely.

Supply does not represent exclusively utility, demand does not represent exclusively estimation. Does not the demander also supply a certain product or the token representing all products, viz., money and as supplier, does he not represent, according to M. Proudhon, utility or use value?

Again, does not the supplier also demand a certain product or the token representing all products, viz., money? And does he not thus become the representative of estimation, of estimation value or of exchange value?

Demand is at the same time supply, supply is at the same time a demand. Thus M. Proudhon's antithesis, in simply identifying supply and demand, the one with utility, the other with estimation, is based only on a futile abstraction.

What M. Proudhon calls use value is called estimation value by other economists, and with just as much right." (Marx, 1978, pp. 33, 34)

What Proudhon calls use value is called "absolute value" or units of "absolute" labour time by von Bortkiewicz. That is to say units of rareté -in Walras' parlance.

Therefore, "absolute" labour time would imply, reciprocally, units of rareté; units of rareté would imply, reciprocally, units of "absolute" labour time. They constitute merely a rhetorical exercise as they are both based on a tautology. Or rather, to use Marx's words, a futile abstraction.

We left Marx's analysis of value when in a paragraph he warns the lector against regarding value as being something purely relative and something intrinsic.

When analysing the commodities, Marx observes that one commodity is exchanged in the most diverse proportions with other commodities. He deduces that the commodities express through their exchange value, first something common to them, and in addition that exchange value can only be but the form of manifestation or the expression of a content differentiable from it.

"Let us further take two commodities, wheat and iron. Whatever the Exchange-ratio, it is always to be represented by an equation, in which a given quantity of wheat is compared with a given quantity of iron, e.g., one quarter of wheat = a cwts. of iron. What does this equation mean? That a common quality exists to the same extent in two diverse things -in a quarter of wheat and also in a cwts. of iron. Each is also equal to a third, which differs from both. Each of the first two, so far as regards Exchange-value, must therefore be reducible to the third." (Marx, 1908, p. 3)

After Marx borrows an analogy from geometry (where the area of rectilinear figures is calculated by decomposing them into triangles, which in turn are reduced to an expression different from its visible form, with reference to which the calculation is done) he concludes that

"This common quality cannot be either a geometrical, physical, chemical, or other natural property of the commodities. Their natural properties only come into consideration because they make them useful -that is in connection with their Use-values. But on the other hand, it is precisely these Use-values in the abstract which apparently characterise the Exchange-ratio of the commodities. In itself, one Use-value is worth just as much as another if it exists in the same proportion. Or as old Barbon says: -'One sort of wares are as good as another if their value be equal. There is no difference or distinction in things of equal value ... One hundred pounds' worth of lead or iron, is of as great a value as one hundred pounds' worth of silver or gold.' (h) As Use-values commodities can only be of different quality; as Exchange-values they can only be of different quantity, containing not an atom of Use-value.

If we separate Use-values from the actual material of the commodities, there remains one property only -that of the product of labour. But the product of labour is already transmuted in our hands. If we abstract from its Use-value, we abstract also the stamina and the form which constitute its Use-value. It is no longer a table, a house, a yarn, or any other useful thing. All its perceptible qualities are effaced. It is no longer the product of the joiner's labour, or of the builder's labour, or of the spinner's labour or of any given productive labour. With the vanishing of the useful character of the labour-product, vanishes also the useful character of the labour represented by it; the different concrete forms of that labour disappear also, and are no longer distinguishable, but are all reduced together to similar human labour -abstract human labour.

Let us now regard the residuum of the labour-product. Nothing remains but this spectral objectivity, (i) a mere protoplasmic mass of promiscuous human labour, i.e. the mere human labour expended, irrespective of the form in which it was expended. The things now only show that human labour was required for their production -that human labour is stored up in them. As crystals of this common, social entity, they are Commodity-values.

(h) The word 'value' as used by Barbon is rendered by Marx 'Tauschwert' (Exchange-value). Cf. Note d, ante.-J.B.



(i) Marx's expression is 'gespenstige Gegenstandlichkeit,' and his idea evidently is, that after abstracting from the said labour-product its Use-value, nothing is left but the result of abstract labour, a spectral something which he likens to 'eine blosse Gallerte unterschiedsloser menschlicher Arbeit,' a homogeneous, gelatinous mass of indistinguishable human labour.- J.B." (Marx, 1908, pp. 3, 4)

Marx has deduced the substance of value without introducing any assumption whatsoever. With the same rigour, he returns to the extent of value:

"A Use-value, or property, (k) only has a value because abstract human labour is stored up or materialised in it. How is the extent of this value to be measured? By the quantity of 'value-forming material,' or labour, which it contains. The quantity of labour is measured by its duration, and the duration of labour is divided into given periods of time, as an hour, a day, and so on.

(k) 'Gut,' or 'good,' as the singular form of the English plural 'goods.' -J.B." (Marx, 1908, p. 5)

Further, Marx elucidates the extent of value as follows:

"It is thus only the quantity of socially necessary labour, or the socially necessary time of labour for the establishing of a Use-value, which regulates its extent of value.(1) The single commodity here serves, in general, as an average example of its class (m). Commodities which represent the same quantity of gross labour, or which can be produced in the same labour-time, have therefore the same extent of value. The value of one commodity is in the same proportion to the value of any other commodity as the period of time necessary for the production of one bears to that necessary for the production of the other. As values, all commodities are but a given mass of condensed labour-time.

(1) 'The value of them (the necessities of life) when they are exchanged the one for another, is regulated by the quantity of labour necessarily required and commonly taken in producing them.' Some Thoughts on the Interest of Money in General and particularly in the Public Funds, etc., London, p. 36. This remarkable anonymous work of the last century is not dated, but there is internal evidence to show that it appeared in the time of George II, about 1739 or 1740.

(m) 'Toutes les productions d'une même genre ne forme proprement qu'une masse, dont le prix se détermine en général et sans égard aux circonstances particulières.' (Le Trosne, l.c., p. 893)"

(Marx, 1908, pp. 5, 6)

As we have seen earlier, von Bortkiewicz claims that "the so-called 'absolute value'" of a commodity is identical with the quantity of labour employed in it. Therefore, for von Bortkiewicz labour time counts not as socially necessary, but on the contrary, exclusively as individual and fortuitous -hence casuistic and isolated labour time. Therefore, for von Bortkiewicz, each individual commodity

is to reflect its own individual "absolute value," in a direct identity with itself. And not as a result of a relation between one commodity and the rest of them. He turns value into an intrinsic and natural reflection, while Walras claims that it is an inwardly geometrical reflection.

In a value equation

$$3 \text{ lb. tea} = y \text{ milk,}$$

von Bortkiewicz and Walras, each have to say, that there are two "absolute values" undifferentiable and undistinguishable from each other. At the same time, they could tell us that in so far as value is merely an index self-identical to prices, there ought to be four prices which happen to be its values. As we have seen before in an analogy with statistics, it amounts to stating that we can simply manipulate indexes which are to have an undifferentiable base as every index can become a special "denomination" of itself. As for the commodity, the extent of value is simply cast aside replaced by an indeterminate decline.

In brief, for Walras and von Bortkiewicz, commodities cannot be considered except in isolated individuality and only as indexes. In other words, the commodities could not undergo annumeration. They could only be lumped or aggregated. For them, commodities can but stand in their splendid isolation as they sink political economy into a "deep night where all cats are grey,"-if we are allowed the phrase.

The reason why we have been following Walras is because von Bortkiewicz claims to be his disciple in method, confirming his artistic-scientific tâtonnement.

"Modern economics is beginning to free itself gradually from the successivist prejudice, the chief merit due to the mathematical school led by Léon Walras.<sup>39/</sup> The mathematical, in particular the algebraic method of exposition clearly appears to be the satisfactory expression for this superior standpoint, which does justice to the special character of economic relations.

<sup>39/</sup> The dispute between the followers of the theory of costs of production and those of the theory of marginal utility is mainly a result of the successivist prejudice."  
(von Bortkiewicz, 1952, p. 24) <sup>24/</sup>

<sup>24/</sup> To be fair to Walras, it should be noted that he upheld the "successivist prejudice," as he exposes in detail;

"Rareté, the cause of value in exchange" (1954, p. 143) in Lesson 10 of the Éléments. In it, he finds a most happy medium with mutual proportionality. In his words: "If, therefore, it is certain that

But while merely contemplating the rarefied scaffolding, von Bortkiewicz also liquidates Ricardo - "the economist par excellence of production," head and shoulders above his executioners joined in by Marshall who, following Walras, manages to syncretize both "general (economic) equilibrium" with partial economic disequilibrium.

"Rather does the Marxian method rest on an unfounded view of the character of economic relations. Alfred Marshall 36/ said once of Ricardo: 'He does not state clearly, and in some cases he perhaps did not fully and clearly perceive how, in the problem of normal value, the various elements govern one another mutually and not successively in a long chain of causation.' This description applies even more to Marx.

36 Principles of Economics, I, London, 1898, p. 565. Cf. p. 597." (von Bortkiewicz, 1952, pp. 23, 24)

Unfortunately neither Ricardo nor Marx ever understood that Political Economy is an empty edifice of mutual tautologies, founded on groping in the dark.

It is well known how Marshall, von Bortkiewicz and Walras "overcome" this blackout; by nothing less than perfect knowledge that enables them as individuals to possess an encyclopaedic erudition of commodities:

"Amongst ordinary people the fiction juris prevails that every man, as a buyer of commodities, possesses an encyclopaedic knowledge of them." (Marx, 1908, p. 2n)

Fiat lux, 25/ and every humble consumer becomes a practitioner of his "innate" wisdom of "optimum" marketing opportunities, i.e. a "maximizer".

Let us take advantage of Léon Walras' putative freedom of any "successivist prejudice", as we turn to his analysis of the origins of value which he systematizes with a criterion such as might remind us of a rather careless Registrar Officer; first the English, second the French, and third the French:

"157. The science of economics offers three major solutions to the problem of the origin of value. The first, that of Adam Smith,

rareté and value in exchange are two concomitant and proportional phenomena, it is equally certain that rareté is the cause of value in exchange." (Walras, 1954, p. 145)

25 "there is perfect knowledge by each buyer and seller of the product (or factor) of the prices currently asked and offered by the other buyers and sellers in the same market;" (Meade, 1965, p. 30)  
In brief,

"He [The consumer] knows the prices of all goods, each of which is homogeneous." (Stonier & Hague, 1972, p. 43)



Ricardo and McCulloch, is the English solution, which traces the origin of value to labour. This solution is too narrow, because it fails to attribute value to things which, in fact, do have value. The second solution, that of Condillac and J.B. Say, is the French solution, which traces the origin of value to utility. This solution is too broad, because it attributes value to things which, in fact, have no value. Finally, the third solution, that of Burlamaqui and my father, A.A. Walras, traces the origin of value to scarcity ( 'rareté' ). This is the correct solution." (Walras, 1954, p. 201)

In referring to scarcity or utility as the "major solutions to the problem of the origin of value", Walras left to oblivion the fact that this was so commonly held in Britain at the very dawn of the 19th century, that both Burlamaqui and his revered parent -e tutti quanti were just repeating it, for instance,

"Lauderdale: 'In proportion as the riches of individuals are increased by an augmentation of the exchange value, the national wealth' (use value) 'is generally diminished; and in proportion as the mass of individual riches is diminished, by the diminution of the exchange value, its opulence is generally increased.'  
(Recherches sur la nature et l'origine de la richesse publique; translated by Lagetie de Lavaïsse, Paris, 1808.)"  
(Marx, 1978, p. 30)

In this respect, Marx notes that

"Lauderdale founded his system on the inverse ratio of the two kinds of value, and this doctrine was indeed so popular in Ricardo's time that the latter could speak of it as of something generally known.

"It is through confounding the ideas of exchange value and riches' (use value) 'that it has been asserted, that by diminishing the quantity of commodities, that is to say, of the necessities, conveniences, and enjoyments of human life, riches may be increased.' Ricardo, Des Principes de l'économie politique, translated by F.S. Constancio and annotated by J.B. Say, Paris, 1835, Vol. II, Chapter 'Sur la valeur et les richesses.')"  
(Marx, 1978, p. 30)

It happened that Walras did not search properly before asserting precedents in the doctrine of value. He ought to have known that Burlamaqui and successors were merely repeating what in Ricardo's time was already a commonplace, which Walras himself takes specially well retributed pains in simply saying over again.

As for the origin of value being "scarcity" and hence, the principle of utility, Walras displayed an optimum degree either of forgetfulness or of lack of information.

Marx cares to remind us all as to where such putative origin of value could lead.

"Classical economy always loved to conceive social capital as a fixed magnitude of a fixed degree of efficiency. But this prejudice was first established as a dogma by the arch-Philistine, Jeremy Bentham, that insipid, pedantic, leather-tongued oracle of the ordinary bourgeois intelligence of the 19th century.<sup>1/</sup> Bentham is among philosophers what Martin Tupper is among poets. Both could only have been manufactured in England.<sup>2/</sup>

1 Compare among others, Jeremy Bentham: Théorie des Peines et des Récompenses, traduct. d'Et. Dumont, 3ème édit. Paris, 1826, p.II, L.IV., ch II.

2 Bentham is a purely English phenomenon. Not even our philosopher, Christian Wolf, in no time and in no country has the most homespun common-place ever strutted about in so self-satisfied a way. The principle of utility was no discovery of Bentham. He simply reproduced in his dull way what Helvetius and other Frenchmen had said with esprit in the 18th century. To know what is useful for a dog, one must study dog-nature. This nature itself is not to be deduced from the 'principle of utility'. Applying this to man, he that would criticise all human acts, movements, relations, etc., by the principle of utility, must first deal with human nature in general, and then with human nature as modified in each historical epoch. Bentham makes short work of it. With the driest naivete he takes the modern shopkeeper [should read: modern philistine (modernen Spießbürger)], especially the English shopkeeper [should read: English philistine (englischen Spießbürger)], as the normal man. Whatever is useful to this queer normal man, and to his world, is absolutely useful. This yard-measure, then, he applies to past, present, and future. The Christian religion, e.g., is 'useful,' because it forbids in the name of religion the same faults that the penal code condemns in the name of the law. Artistic criticism is 'harmful,' because it disturbs worthy people in their enjoyment of Martin Tupper, etc. With such rubbish has the brave fellow, with his motto, 'nulla dies sine linea,' piled up mountains of books. Had I the courage of my friend, Heinrich Heine, I should call Mr. Jeremy a genius in the way of bourgeois stupidity." (Marx, 1918, p. 668)

Walras, in his turn, discovers that a "good" could "have a diminished intensive utility for him"<sup>26/</sup>, because his rareté or "intensity of the last want"<sup>27/</sup> is reduced. An epoch making finding indeed.

As for the fixed degree of efficacy of the total social capital, Walras cares to state it for us as follows:

"In making this assumption [the special a priori assumption of constant coefficients of production], we are neglecting another matter, namely that of the distinction between fixed and variable costs in business. But since we are assuming that entrepreneurs make neither profit nor loss [as the rate of profit is simply presupposed], we may as well assume that they are also manufacturing equal quantities of products, in which case costs of all kinds may be considered as variable [proportionnels]." (1954, p. 240)

26 1954, p. 117.

27 1954, p. 119.

And what is "costs of all kinds"?

"[T]he fact that the selling prices of the products are equal to the cost of the productive services employed in their manufacture." (Walras, 1954, p. 240)

Hence, price is made proportional to cost of production, i.e. "the cost of the productive services" in a presupposed fixed ratio, while it is assumed the exclusive production of one single commodity.

As for the rest, we have seen that price is made proportional to "absolute value." This is whether "absolute value" is relabelled as units of rareté by Walras, or relabelled as units of "absolute" labour time by von Bortkiewicz. One axiomatically implies the other, as Lauderdale and Proudhon duly repeat. Needless to add that as von Bortkiewicz pledges that "absolute value" is identical with the "absolute" labour time employed in its production, he is implicitly stating that "absolute value" is proportional to "rareté." That is why he found himself in agreement with Walras' system of mutually supporting commonplaces.



### 3. Extent of value

#### a. David Ricardo: necessary labour v. isolated labour

The doctrine of value put forward by von Bortkiewicz ignores the opening of Ricardo's main work:

"The value of a commodity...depends on the relative quantity of labour which is necessary for its production" (1951a, p. 11)

Hence, Ricardo is not stating that the "so-called 'absolute value'" of a commodity is identical with "the quantity of labour employed in its production", i.e. "absolute value", as von Bortkiewicz states, but that the value of a commodity depends on the relative quantity of labour necessary for its production. This does not stop some commentators from recognizing in him a disciple of Ricardo <sup>1/</sup>.

If Ricardo does not speak of the socially necessary labour time, as determining the extent of value, but simply of the necessary labour embodied in the commodities, it is simply because his knowledge of other modes of production aside of the bourgeois one was so meagre that it was close to nullity.

"Apart from bourgeois society, the only social system with which Ricardo was acquainted seems to have been the 'parallelograms of Mr. Owen'." (Marx, 1970, p. 60) <sup>2/</sup>

1 For instance, P.M. Sweezy claims that "it seems to me that Bortkiewicz must be described as a modern Ricardian. The powerful impress of Ricardo's thought is evident throughout, and Bortkiewicz was at great pains to defend Ricardo against what he considered to be unjustified criticism." (1949, p. xxvi)

Sweezy would not have delivered this explicitly superficial -hence erroneous- characterization if he was acquainted either with Ricardo or with whom he happened to be editing -not to mention Marx. Further, a fair degree of simplicity is required not to realize that while Ricardo refers to the quantity of labour relative and necessary on which the value of a commodity depends, in von Bortkiewicz value is manhandled as an "absolute," as a tautological -hence fortuitous- identity devoid of any regulation whatsoever. Moreover,

"This identification of Sweezy is the more absurd as the value of a commodity is determined not by the quantity of labour actually realized in it, but by the quantity of living labour necessary for its production." (Marx, 1918, pp. 587, 588)

As can be seen, Sweezy himself is "at great pains" (and recompenses) to deliver platitudinous utterances.

2 In this respect, Ricardo longs: "If we lived in one of Mr. Owen's parallelograms, and enjoyed all our productions in common, then no

Unfortunately, Ricardo died searching for the source of value. He did not examine this form, i.e. the form of value. He speaks of the relative quantity of labour, without further analysing either the nature of this labour nor how the extent of value, i.e. exchange value, stamps itself in the money form or price. Therefore, his analysis does not disclose the substance of value -labour, human labour sans phrase. However, Marx recognises in him the "last greatest representative" of classical political economy.

Ricardo's analysis of the extent of value is thrown overboard by vulgar economics. For instance, von Bortkiewicz replaces the "relative quantity of labour which is necessary for its  $\int$  a commodity  $\int$  production", with the "so-called 'absolute value' of a commodity, which is identical with the quantity of labour employed in its production". Necessary labour is replaced by fortuitous and individual labour presupposed in one commodity alone, and turned into an "absolute".

The analysis of the extent of value of Ricardo is cast aside and a set of indexes put in its place, i.e. "value is merely the index of an exchange relationship", alongside a set of "absolute values". Therefore, in von Bortkiewicz, Ricardo is buried and reduced to a chain of tautologies.

However, David Ricardo did not clearly understand that labour is not in itself value. Value is not an inherent, intrinsic property of man when he exerts his capacity to labour or labour power to transform nature. However, this labour power, when embodied in use-values produced for exchange, acquires value, i.e. the products of labour acquire a value form. These products of labour with a one could suffer in consequence of abundance, but as long as society is constituted as it now is, abundance will often be injurious to producers  $\int$  meaning wage labourers  $\int$ , and scarcity beneficial to them" (1951c, p. 222)

As for Owen's Utopia, see for instance his Report (1970, p. 200ff.), where he was anxious to demonstrate that an optimal "arrangement for feeding, lodging, and for training and educating the children" (p. 229) in his proposed communes ought to acquire the geometrical shape of a parallelogram. But to be fair, "Robert Owen, the father of Co-operative Factories and Stores, but who, as before remarked  $\int$  pp. 529, 530  $\int$ , in no way shared the illusions of his followers with regard to the bearing of these isolated elements of transformation, not only practically made the factory system the sole foundation of his experiments, but also declared that system to be theoretically the starting point of the social revolution." (Marx, 1918, p 552n)

value form, viz, commodities, embody an extent of such social substance -labour, human labour. In other words, value is materialized labour when labour power unfolds itself in a useful manner in the production of commodities.

Marx clarifies Ricardo's confusion and exposes to us the shortcomings of Ricardo's analysis.

The insufficiency of Ricardo's analysis of the extent of value -and his is the best- will be shown in Books III. and IV. of this work. So far as regards value in general, classic political economy never clearly nor expressly distinguishes the labour represented in value from the same labour so far as it is represented in the Use-value of the product. Of course it makes this distinction, for it regards labour now from the point of view of quality, and anon from that of quantity. But it never occurs to it that a simple quantitative difference of labours supposes their unity or their qualitative equality, that is to say, their reduction to abstract human labour. Ricardo, for example, declares himself in accord with Destutt de Tracy, when he says, 'As it is certain that our physical and moral faculties are alone our original riches, that the employment of those faculties in labour of some kind is our original treasure, and that it is always from this employment that all those things are created which we call riches, it is equally certain, too, that all those things only represent the labour which has created them, and if they have a value, or even two distinct values, they can only derive them from that (value) of the labour from which they emanate.' (Ricardo, The Principles of Political Economy, 3rd. Edition, London, 1831, p. 334.) We will only add that Ricardo takes the words of Destutt in too profound a sense. Destutt says, indeed, on the one hand, that the things which constitute riches 'represent the labour which has created them', but, on the other hand, he assumes that they draw their 'two different values' ('zwei verschieden Werte') (Use-value and Exchange-value) from the 'value of the labour'. He thus falls into the mistake of vulgar economy, which first assumes the value of one commodity -labour for example- in order to determine the value of the rest. Ricardo reads him as if he has said that labour (not its value) is represented as well in Use-value as in Exchange-value. But he distinguishes so little the double character of labour, that in his entire chapter upon 'Value and Riches,' he is reduced to discussing, one after another, the trivialities of one J.B. Say, and is quite astonished at the close to find that he agrees on the one hand with Destutt as to labour being the source of value, and on the other hand he arrives at the same conclusion as Say with regard to value itself." (Marx, 1908, p. 45n)

In the following passage, we can see how Ricardo, quoted by Marx, is reducing different kinds of labour to simple labour, embodied in the commodities.

"'It is the comparative quantity of commodities which labour will produce, that determines their present or past relative value' (l.c., p. 9).

'Relative value' here means nothing other than the exchangeable value as determined by labour-time." (Marx, 1968, p. 170)



What kind of labour time? Isolated, intrinsic, absolute labour time pertaining to one commodity excluding all the rest, as in von Bortkiewicz? No. Ricardo is speaking of relative value of commodities, and not of the "absolute value" of "goods". Moreover, Ricardo is telling us that such relative value depends on "the comparative quantity of commodities which labour will produce". What kind of labour? Perhaps of labour that is absolutely equal in value, hence "absolute value" without any need of undergoing a comparison? No. Ricardo is speaking of relative value of commodities depending on labour of different kinds -or qualities, i.e. of

"Labour of different qualities differently rewarded. This is no cause of variation in the relative value of commodities". 3/

Therefore, different skills of labour presupposes its qualitative unity or equality. Or to put it in another way, Ricardo is implicitly reducing different kinds of labour to simple labour. So Ricardo has taken into account all the various different qualities of labour embodied in the commodities when he tells us that "The value of a commodity...depends on the relative quantity of labour which is necessary for its production".

Von Bortkiewicz, on the contrary, takes one single commodity, while he ignores the rest. He does not recognize that a comparison takes place among labour of different qualities, of different skills, as he explicitly excludes them. Hence he can just utter a direct identity between the labour employed in such and such a commodity and that commodity itself. At the same time, he has isolated each and every single commodity from the rest of their genus, while abolishing perforce, the genus itself. Hence, von Bortkiewicz cannot speak of commodities, because their content for him is something intrinsic and "absolute", which cannot be excogitated.

Marx adds, referring to Ricardo:

"But relative value can also have another meaning, namely, if I express the exchange-value of a commodity in terms of the use-value of another, for instance, the exchange-value of sugar in terms of the use-value of coffee.

'Two commodities vary in relative value, and we wish to know in which the variation has...taken place' (l.c., p. 9)"  
(Marx, 1968, p. 170)

What is the difference between the two senses in which

"relative value" appears in Ricardo?

3 Ricardo, 1951a, p. 20.

"Hence, whether the values of two commodities are expressed in their own reciprocal use-values or in their money price -representing both commodities in the form of the use-value of a third commodity- these relative or comparative values or prices are the same, and the changes in them must be distinguished from changes in their relative values in the first sense of the term, i.e., in so far as they only express the change in the labour-time required for their own production, and thus realised in themselves. The latter relative value appears as 'absolute value' compared with relative values in the second sense, i.e., in the sense of actually representing the exchange-value of one commodity in terms of the use-value of the other or in money. That is why the term 'absolute value' occurs in Ricardo's work, to denote 'relative value' in the first sense." (Marx, 1968, p. 171)

Therefore, "absolute value" appears in Ricardo to denote "the comparative quantity of commodities which labour will produce". What labour? "the relative quantity of labour which is necessary for its production".

In von Bortkiewicz, "absolute value" is identical to itself, i.e., identical with the quantity of labour employed in its production; "absolute" labour.

It is, as we have seen, von Bortkiewicz, who systematically follows Destutt, for whom labour is "absolute" labour, and therefore, "absolute value", as if it were a natural property, "our original treasure". Von Bortkiewicz also presupposes the value of one commodity, and starting from that one commodity he proceeds to estimate the value of all the rest, while he validates his credentials in vulgar economics.

The following quotation from Bailey is important to note, in so far as he takes Ricardo for a vulgar economist, while he -Bailey- identifies Ricardo's liquidators -self-confessed followers- with Ricardo himself. Therefore Bailey's allegations against Ricardo, fit in fact for von Bortkiewicz.

"In the first of the above-mentioned works, Bailey says:

'Instead of regarding value as a relation between two objects, they' (Ricardo and his followers) 'consider it as a positive result produced by a definite quantity of labour.' (Samuel Bailey, A Critical Dissertation on the Nature, Measures and Causes of Value, London, 1825, p. 30)

They regard 'value as something intrinsic and absolute' (l.c., p. 8).

The latter reproach arises from Ricardo's inadequate presentation, because he does not examine the form of value -the particular form which labour assumes as the substance of value. He only examines the magnitudes of value, the quantities of this abstract, general and, in this form, social, labour which engender differences in the magnitudes of value of commodities. Otherwise Bailey would have recognised that the relativity of the concept of value is by no

means negated by the fact that all commodities, in so far as they are exchange-values, are only relative expressions of social labour-time and their relativity consists by no means solely of the ratio in which they exchange for one another, but the ratio of all of them to this social labour which is their substance.

On the contrary, as we shall see, Ricardo is rather to be reproached for very often losing sight of this 'real' or 'absolute value' and only retaining 'relative' and 'comparative values'." (Marx, 1968, p. 172)

It has been demonstrated here, that there is no case of intrinsic value or of the so-called "absolute value" in Ricardo.

#### b. Adam Smith: value and its source confused

The confusion between value and its source repeats itself in Adam Smith.

"In order to prove 'that labour is the final and real quality by which the value of all commodities may, at all times, be estimated and compared,' Adam Smith says: -'Equal quantities of labour, at all times and places, may be said to be of equal value to the labourer. In his ordinary state of health, strength, and spirits; in the ordinary degree of his skills and dexterity, he must always lay down the same proportion of his ease, his liberty, and his happiness.' (Wealth of Nations, vol. I., Chap. V). On the one hand Adam Smith here (though not throughout) confounds the determination of the value by means of the quantity of labour expended in the production of commodities with the determination of the commodity-value by means of the value of the labour, and seeks thereby to prove that equal quantities of labour have always the same value. On the other hand he anticipates that labour, so far as it is represented by the value of commodities, is only to be held as the expenditure of labour power, but apprehends this expenditure simply as a sacrifice of rest, freedom and pleasure, not even as the normal work of life. He has ever the modern wage-worker before his eyes." (Marx, 1908, p. 12n)

Von Bortkiewicz takes advantage of this confusion of Adam Smith to fabricate the "so-called 'absolute value'", either ignoring or emasculating the reference to the simple average degree of skill, to run away and seek isolation in a commodity subsequently replaced by "goods".

How then has von Bortkiewicz devised his "absolute value"?

i) By drawing selectively from Adam Smith in the above quid pro quo, as the ordinary degree of skill is supplanted by one single and unique "absolute" labour, whose value is presupposed, denying the qualitative difference of skills and personal faculties.

ii) By taking advantage of Ricardo's use of the term "absolute value", while he picks only the name and obliterates the fact that Ricardo was explicitly speaking of relative quantity of necessary



labour and not of individual, isolated and fortuitous labour identical to the "absolute value" of a sole commodity.

iii) By replacing his endeavours in items i) and ii) on the words of Marx, or more precisely, into the "mind" of Marx, from where he claims he has drawn it.

The absence of any further trace of the origin of the "so-called 'absolute value'" in von Bortkiewicz, leaves the impression that either it was a vulgar town-cry in his lifetime, or he was concealing the fabrication of a serious transgression, "since its source does not dare to come out and appear in the open field, hiding his own name, concealing its origin, as if he had committed some treason of lèse-majesté."\*

Nevertheless, we have exposed how von Bortkiewicz puts on the words of Marx an equivocation sifted from Adam Smith, using merely the shelter of Ricardo's locution of "absolute value".

### c. Simple and compound labour

As von Bortkiewicz asserts that the so-called "absolute value" of a commodity is identical with the labour employed in its production, and its price or value in its turn proportional to "absolute value", he enters into a new blind alley.

How would he explain that different commodities contain embodied labour of different degrees of skill when they confront each other in the market? For von Bortkiewicz this problem is unsurmountable. He has "arrived" at "absolute value" of a commodity by excluding the rest of commodities.

Therefore, in von Bortkiewicz's case, labour cannot be compared. In applying his tautologically identical value, i.e., the "so-called 'absolute value'", commodities could not be realized unless all labour was identical, with no difference whatsoever in the degree of skill, natural capabilities etc.<sup>4/</sup>

The reproach is often made against Marx that his treatment

\* From Cervantes, Don Quixote, prologue to Part II.

4 It is clear that no two commodities are self-identical or self-same, viz., unique. When reference is made to commodities, they are to be considered as average samples of their class, without artificially secluding them. It follows that the same holds for their producers, in so far as the commodities are the embodiment of social labour, viz., in so far as they are social magnitudes.

of simple and compound labour was sketchy and unfinished, and that he remained unaware of the extent of the problem.<sup>5/</sup> A most polite suggestion of shortsightedness on the part of Marx. However, this reflects and requires a great deal of -pretended or actual- ignorance of classical political economy, in particular of Smith and Ricardo.

Let us turn to Ricardo once more. The second section of the first chapter of his Principles is titled:

"Labour of different qualities differently rewarded. This is no cause of variation in the relative value of commodities"  
(Ricardo, 1951a, p. 20)

How, then, is ingenuity, skill and intensity of different labours compared? Ricardo goes around the problem in this section, repeating that it is possible, that it happens, that it takes place. Of how it takes place, he quotes Adam Smith, who explains the way in which it occurs.

"'But though labour be the real measure of exchangeable value of all commodities, it is not that by which their value is commonly estimated. It is often difficult to ascertain the proportion between two different quantities of labour. The time spent in two different sorts of work will not always alone determine this proportion. The different degrees of hardship endured, and of ingenuity exercised, must likewise be taken into account. There may be more labour in an hour's hard work than in two hours easy business; or, in an hour's application to a trade, which it costs ten years' labour to learn, than in a month's industry at an ordinary and obvious employment. But it is not easy to find any accurate measure, either of hardship or ingenuity. In exchanging, indeed, the different productions of different sorts of labour for one another, some allowance is commonly made for both. It is adjusted, however, not by any accurate measure, but by the higgling and bargaining of the market, according to that sort of rough equality, which though not exact, is sufficient for carrying on<sup>2/</sup> the business of common life.' -Wealth of Nations, book i.chap.10<sup>2/</sup>.

<sup>2</sup> This passage actually occurs in Bk. 1, ch. V; Vol. 1, p. 33. But Bk. I, ch. X, pt. i, contains a long discussion of the same subject [Ed.] (Ricardo, 1951a, p. 21n)

It is by exchanging the products of labour in their commodity form that "hardship and ingenuity" undergo a process of equalisation.

An equalisation of "the different productions of different sorts of

<sup>5</sup> "His [Marx's] treatment of the skilled-unskilled [viz., compound-simple] labour problem (below, pp. 167-73), although suggestive enough is rather fragmentary and incomplete, and there seems little doubt that he underestimated the importance of the problem."  
(Meek, 1973, p. xvi)

By the way, Marx dealt with this question in Das Kapital and not "below," i.e., in Studies in the Labour Theory of Value. Marx never made use of compilers to express himself. Far less to deal with a specific matter.

labour", as Smith observes.<sup>6/</sup> He also points out that "The higgling and bargaining of the market" does not constitute an invariable scale or an invariable measure of value. Value is a social relation, embodied in the use-value of the commodity. A variable relation manifesting itself in its money form, vulgo price.

Let us return to von Bortkiewicz, who disposes of the whole matter by avoiding it, as follows:

"(2): The problem of reducing all labour to a 'simple average labour' has been so well elucidated by anti-Marxists, notably G. Adler <sup>138/</sup> and Böhm-Bawerk, <sup>139/</sup> that it would be a work of supererogation to dwell once more [7/] on the inadequacy of Marx's treatment of this question.

<sup>138</sup> Die Grundlagen der Karl Marxchen Kritik der bestehenden Volkswirtschaft, Tübingen, 1887, pp. 81-85.

<sup>139</sup> Zum Abschluss etc., pp. 164-169." (1952, p. 57)

After this laconic treatment of the problem, when he is about to finish his dissertation, he proceeds with his "positive observations" on this matter:

"We need here only take steps to prevent our positive observations on the relation between prices, wages and profits from being regarded as if they involved this Marxian 'reduction theory'. In these positive observations, the wage-rate has been considered to be a magnitude equal for all lines of production and for all professions. We have simply disregarded the existence of categories of workers receiving different wage-rates. The whole exposition thus acquires the character of a far-reaching abstraction, without, therefore -it seems to me- losing all interest." (von Bortkiewicz, 1952, pp. 57, 58)

6 In spite of Smith and in spite of Ricardo, Böhm-Bawerk claims that -"They [these classical political economists] did not seek to prove -they postulated, as a 'natural' state, an idyllic state of things where labour and value were one." (1949, p.78; emphasis added) Böhm-Bawerk exposes a sui generis manner of attacking his contenders. He seeks to disprove them not by examining their analysis -with which he is not concerned, even if he ever knew it, but by ignoring it altogether. It is ostensible that Smith -quoted by Ricardo- is attempting to explain how it is that quantitatively different labourers are equalised through their produce. It is only by thoroughly substituting an apologetic identification between value and labour -neatly depicted by Böhm-Bawerk and von Bortkiewicz- for the determination of value by the quantity of labour invested in a commodity, that such broadside can be raised. But if Böhm-Bawerk sees in Ricardo, for instance, that "labour and value were one", why should not Sweezy see in von Bortkiewicz a disciple of Ricardo, as before remarked?

7 Here, von Bortkiewicz seems to contradict himself, as he claims, just before, that "In order to anticipate misunderstandings, we shall, however, briefly discuss some points which we have hitherto disregarded. These points concern: ...(2) the reduction of all labour to 'simple average labour';" (1952, p.56; emphasis added). For von Bortkiewicz, to examine Marx means to disregard him -so far; in which case, the supererogation would fit for the putative dweller of Marx's "mind".



This procedure is characteristic of this objector. Leaving aside his obliteration of Smith, not to mention the blind eye he turns on Marx in order to dismiss him, he solves the question of different degrees of skill among labourers by assuming from the outset one single wage-labourer. As a result, he finds that dissolved by such a "far-reaching abstraction" -and diversion, this question becomes almost meaningless. In his words, "without...losing all interest" -or more exactly, "without, therefore...losing all interest."

Von Bortkiewicz is correct in so far as his assumptions are irrelevant as far as labourers with different skills and intensities of the labour they embody, are concerned. Further, he refuses to have any relation or involvement with Marx's analysis on how the process of reduction from compound to simple labour takes place, which he calls "reduction theory". It does not require much acuity to realize that once von Bortkiewicz has assumed a unique and isolated labourer, the confusion between different labourers, not to mention its reduction, becomes unsurmountable within his constraints. Due to his theoretical self-imposed limitations, his considerations constitute a "far reaching" tautology -which is to be all his endeavours could comprehend.

Before we proceed with von Bortkiewicz, let us turn to another well-known contender of Marx, who did not dispose of him so swiftly.

"Therefore the position is not,' Herr Dühring proceeds, 'as in Herr Marx's nebulous conception, that the labour-time of one person is in itself more valuable than that of another, because more average labour-time is condensed as it were within it, but that all labour-time is in principle and without exception perfectly equivalent, and there is therefore no need to take an average first.'" (Engels, 1976, p. 254)

Here we see that von Bortkiewicz and Dühring reach the same results, whereby the Utopia of self-sameness is to imbue their "equalitarian" dictums. Instead of examining how different kinds of labour embodied in commodities are equalised, a positive assurance is provided that the labour-time contained in a commodity is identical with itself, with its "absolute" labour-time. Hence "absolute value".

Marx has already noted that Smith and Ricardo are aware of the quantitative difference of labour as expressed in the value of the commodity, as they explain how the different skills and intensities of labour are equalised in the market. Marx observes also that it did not occur to Ricardo, for instance, that the quantitative

difference of different skills and intensities in which labour is invested presupposes its qualitative unity, without which they could not undergo equalisation, likewise presupposing its reduction to abstract human labour. In other words, the reduction of compound to simple labour takes place on the basis of its qualitative equality -human labour sans phrase.<sup>8/</sup>

Let us see how Marx further refers to the relation between compound and simple labour:

"It [human labour] is the expenditure of that simple labour-power, which, on an average, each individual without any special cultivation possesses in his living organism. This simple average labour-power varies in character, of course, in different countries, and at different periods of progress, but in any given community it is fixed. Complicated labour is but concentrated or often-multiplied simple labour, so that a smaller quantity of complicated work is equal to a larger quantity of simple work. That this comparison always holds good is shewn by experience. A commodity may be the result of the most intimate labour, but its value is always compared with the product of more simple labour, and therefore represents only a fixed quantity of that more simple labour(q). The various proportions in which different kinds of labour are reduced to their measurable unit of simple labour, are fixed by a social process behind the backs of the producers,(r) and are made manifest to them by the results.

(q) It must be observed that this remark does not apply to the wages or money value which the workman receives for a given day's labour, but to the commodity-value by which his day's labour is represented. The question of wages does not at present come within the scope of our argument.

(r) Marx's expression is 'hinter dem Rücken der Produzenten,' and his meaning no doubt is that the said process fixes these proportions by a law beyond the control of the producers of the commodities, who only see the working of that law by its results. -J.B." (Marx, 1908, p. 10)

Let us note that, implicitly, Marx is also correcting Ricardo and Smith, in whom the consuetudinary character of the different qualities of labour was thought of as hardly undergoing any change throughout time<sup>9/</sup>.

8 In passing, let us point out that once labour-time is uncritically taken as an "absolute" sameness, the most simple fact of labour mobility from one activity to another, becomes impossible to explain.

9 Ricardo, for instance, states that "The scale [constituted by Labour of different qualities differently rewarded] when once formed, is liable to little variation." (1951a, p. 20) Curiously enough, von Bortkiewicz makes out of the "little" reading in Ricardo, a nought: "Ricardo's assumption that a constant ratio prevails between the various wage-rates, thus proves to be an element which greatly facilitates calculation." (1952, p. 58n); meanwhile, the wages of the labourer are confused with the quantity of labour embodied in the commodity.

In respect to the last quotation on Marx, where Dühring discovered the nebulous conception of "absolute" value and "absolute" labour-time, Engels observes:

"Unfortunately Marx put a short footnote to the passage in Capital cited above [see supra]: 'The reader must note that we are not speaking here of the wages or value that the labourer gets for a given labour-time, but of the value of the commodity in which that labour-time is materialized.' Marx, who seems here to have had a presentiment about his Dühring, therefore safeguards himself against an application of his above statement to the wages which are paid in existing society for compound labour. If Herr Dühring, not content with doing this all the same, presents these statements as the principles on which Marx would like to see the distribution of the necessities regulated in a socialistically organized society, he is guilty of shameless imposture, the like of which is only to be found in the gutter press." (Engels, 1976, pp. 255, 256)

Above, we have seen how von Bortkiewicz, in the guise of briefly discussing "the reduction of all labour to 'simple average labour'", in fact eludes it. He avoids even mentioning different skills of labour which his assumptions cannot deal with, as he ends up speaking again of a unique wage rate, as seen before. Further, neither von Bortkiewicz nor Dühring could touch upon "the reduction of all labour", moreover, to simple average labour. For them, labour is to be taken "absolutely equal in value" -to use Dühring's words; viz., identical with itself -in von Bortkiewicz's case. Further, they cannot speak of "all labour", as in their rationale only one labourer could fit.

In this procedure, Sweezy could but closely follow von Bortkiewicz's steps:

"From the point of view of the problems which he [Marx] set himself to investigate, differences between skilled and unskilled labour [i.e. compound and simple labour] were not essential. To ignore them, hence is an appropriate abstraction within the meaning of that term explained in Chapter I [of Sweezy's Theory of Capitalist Development] above. This is not to imply that such an abstraction would always be appropriate. If Marx had been interested in explaining differences in wages, for example, it clearly would have been illegitimate.\*

(\*) In this connection Marx's practice does not differ essentially from that of modern [should read: bourgeois] economists. As Hicks expresses it, 'if changes in relative wages are to be neglected, it is quite legitimate to assume all [wage] labour homogeneous.' J.R. Hicks, Value and Capital (1939), pp. 33-4" (1946, p.45)

Sweezy appoints himself judge of the differences between different skills of labour and passes his verdict on Das Kapital by ignoring



it, i.e., by claiming that in it such differences are regarded as accidental and fortuitous, namely, "not essential". Next, he justifies his ignorance under the pompous name of "appropriate abstraction", which reduces itself to a sort of questionnaire through which Sweezy himself has no doubt undergone,<sup>10/</sup> to be exercised at discretion and arbitrarily imposed on Marx. After this achievement, it should not have been difficult for Sweezy to arrive where he started, i.e. assuming "all labour homogeneous" -just like Hicks.<sup>11/</sup> After Sweezy has proved what he has assumed, he proceeds

10 Sweezy's panacea is prescribed as follows: "It is well to note, however, that a great many criticisms of Marx's economics are, consciously or unconsciously, based upon a rejection of the assumptions with which he works. Our discussion should help to establish criteria by which to judge the validity of these criticisms. In each case, the following three questions should be asked about the simplifying assumptions (or abstractions) which give rise to criticism: (1) are they framed with a proper regard for the problem under investigation? (2) do they eliminate the non-essential elements of the problem? (3) do they stop short of eliminating the essential elements? If all three of these questions can be answered in the affirmative, we may say that the principle of appropriate abstraction has been observed. This principle is of great assistance in testing the relevance and validity of a considerable range of Marx criticism." (1946, p. 20)

As can be seen, everything has been done for the best of reasons plus "This Mr. Sweezy's three-in-one principle."

11 Hicks refers to his procedure from where Sweezy actually quotes him, "This principle is of quite general application...A collection of physical things can always be treated as if they were divisible into units of a single commodity so long as their relative prices can be assumed to be unchanged, in the particular should read: special problem at hand. So long as the prices of other consumption goods are assumed to be given, they can be lumped together cannot Professor Hicks add here? into one commodity 'money' or 'purchasing power in general'. Similarly, in other applications, if changes in relative wages are to be neglected, it is quite legitimate to assume all wage labour homogeneous. There will be other applications of this principle still to notice as we go on.<sup>1/</sup>

1 Beyond this it does not seem necessary to worry about the definition of a 'commodity'. What collections of things we regard as comprising a commodity must be allowed to vary with the problem in hand." (1974, pp. 33, 34)

Hence, for Professor Hicks a commodity must be something devoid of determination, as its content "must be allowed to vary" as he decides so. Hence a commodity is something purely relative. In order to avoid any further question, he tells his readers not to worry about what the commodity is, if at all. Hence, the "commodity 'money'" should be, likewise, purely relative. As for the rest, Hicks is making quite clear that: i) a collection of physical things can always be treated as if they were discrete units of one single commodity; ii) prices would be lumped into one commodity "money"; iii) wage-labour is to be treated as one single wage labourer. We would only observe further, aside of his self-imposed constraints, that his allusion to "all labour homogeneous" is a device to make a vicious circle, i.e. one wage labourer tautologically

-in spite of Marx and Engels- to intrude an alien consideration in this respect. Namely, how much or how little would the labourer get in the form of wages. Further, he assumes that such fluctuations are non-existent, i.e. a unique wage rate, while he attributes such feat to Marx, whose "practice does not differ essentially" from bourgeois economics. Marx refuted long ago this preposterous analogy and erroneous imputation by Sweezy. If he -Sweezy- was to identify "modern economists" (who speak of one commodity, one producer, viz., "all labour homogeneous", one "commodity 'money'", and implicitly one consumer) at all it had to be with the well known -though ignored by Sweezy- Utopian:

"He [Proudhon] carries [the appropriate?] abstraction to the extreme limits when he fuses all producers into one single producer, all consumers into one single consumer, and sets up a struggle between these two chimerical personages. But in the real world, things happen otherwise." (Marx, 1978, pp. 36, 37) 12/

Alternatively, Professor Michio Morishima seems to have found quite handy the ready-made path borrowed by Sweezy one generation ago from modern economics, as he states that:

"We have so far assumed that all labour is homogeneous." 13/

"That is to say, as soon as the heterogeneity of labour is allowed for, the theory of value is seen to conflict with Marx's law of the equalization of the rate of exploitation through [capitalist] society unless the different sorts of labour are reduced to the homogeneous abstract human labour in proportion to their wage rates." 14/

Once Professor Morishima assumes that "all labour is homogeneous", meaning one single producer,<sup>15/</sup> he discovers to his amazement, that different "sorts" of labour, i.e., more than a one producer, do not fit his assumption, which from the outset presupposes a unique and self-identical "sort" of labour which he disguises relabelled as "homogeneous abstract human labour". Therefore, Professor Morishima presents as a conclusive constraint what could just be a most

identical to himself, appear as a rigorously deduced "principle" -along with one determinateless commodity. It looks as if this "homogeneity" was an ordinary justification to engage in vicious circles, as already encountered earlier.

12 It looks as if Sweezy's triplicity was a most efficient unctio[n] to an "appropriate [futile] abstraction".

13 Morishima, 1973, p. 190.

14 Morishima, 1973, p. 180.

15 "We assume in the following: ...there is no problem of 'heterogeneous concrete labours!'" (Morishima, 1973, p. 12)

gratuitous supposition on his part. As can be seen, the difficulties for him lay in that he ends where he should have started. But instead of asking how different kinds of labour reduce themselves to simple labour, and under what ground is such equalization operated, he gets rid of all the rest of the labourers -which were a hindrance for him, as he imposes on Marx the futile abstraction of a Proudhon. Instead of rising such unproven charges as far as Marx is concerned, Professor Morishima should have explained how he arrived at what he calls "all labour homogeneous", quite aside of slipping it in as an assumption. After Professor Morishima assumes the impossibility of the formation of average simple labour, he finds himself introducing an extraneous question, i.e. the decomposition of the value of a commodity, witnessed by him in demanding the assumption, further, of an "all homogeneous" wage rate.<sup>16/</sup>

That Professor Morishima espouses Böhm-Bawerk's view, is confirmed as he makes clear that

"However, the classical criticism which originated [sic] with Böhm-Bawerk applies to the labour theory of value, not only in its original version, but also in the revised one." (1973, p. 180)

As it is well known for anybody superficially acquainted with political economy during the last century, Böhm-Bawerk's source of classical originality consists in delivering a revised version of Jean Baptiste Say's attack on Ricardo's "partisans",<sup>17/</sup> regressed to comprise even "the so-called classical writers",<sup>18/</sup> that is to say Adam Smith<sup>19/</sup> and

<sup>16</sup> As could be seen, by "all labour is homogeneous", Professor Morishima means a unique wage labourer identical to itself in a neat tautological fashion, in the same platitudinarius procedure as Hicks, among others: "Perfect competition also prevails in the labour market and therefore wages and the working day are equal for very worker." (Wolfstetter, 1973, p. 789)

<sup>17</sup> "Releasing themselves from the control of experience, they [Ricardo's partisans] threw themselves in some sort of metaphysics without application, they have transformed political economy in a science of words and arguments; under the pretext of understanding it, they have pushed it to the void. But this method is not of our century, which wishes that one should not go astray from the experience and from the plain good sense" (Say, 1841, p. 41)

<sup>18</sup> Böhm-Bawerk, 1949, p. 78n.

<sup>19</sup> "In short, the famous passage in which Adam Smith [Wealth of Nations, vol. I chap. 5], the Old Master, introduces the labour principle into the doctrine of value is as far removed as it well can be from what it is ordinarily claimed to be. For the claim is usually made that it must be recognised as a great and well supported scientific fundamental proposition. But it is not compellingly self-evident; it is not supported by a single word of substantiating argument; it is clothed in the careless language, has the neglectful



Ricardo<sup>20/</sup> themselves. As could be imagined, J.B.Say was also judging Marx in advance<sup>21/</sup>. On the same grounds, Professor Morishima could have said that Say's objections hold not only for Ricardo and Smith, but that they even prophesized the outcome for the "revisions" that Ricardo's "partisans" could fulfil providing he knew of them which does not appear to be the case, as to include his own endeavours, which is certainly the case<sup>22/</sup>.

character of untutored speech; finally it contradicts itself...Doctrines like that can secure a victory only when people are taken by surprise.

(Böhm-Bawerk, 1959, p. 289) Aside of rehearsing Say's "arguments", Böhm-Bawerk exposes himself by the assailing charge he bestows on Smith.

20 "Ricardo himself overstepped the legitimate bounds only by very little... His only error is that he greatly overestimates the extent to which his labour/law of value is valid and practically ascribes to it almost universal applicability... In consequence he comes to speak -quite incorrectly- of his law in phrases that imply that his labour/law of value really is a universal labour law of value."

(Böhm-Bawerk, 1959, p. 302)

21 "Herein lies, I believe, the alpha and omega of all that is fallacious, contradictory, and vague in the treatment of his subject by Marx. His system is not in close touch with facts. Marx has not deduced from facts the fundamental principles of his system, either by means of sound empiricism or a solid economico-psychological analysis; he founds it on no firmer ground than a formal dialectic...The system runs in one direction, facts go in another and they cross in the course of the system sometimes here, sometimes there, and on each occasion the original fault begets a new fault. The conflict of system and facts must be kept from view, so that the matter is shrouded either in darkness or vagueness, or it is turned and twisted with the same tricks of dialectic as at the outset; or where none of this avails we have a contradiction."

(Böhm-Bawerk, 1949, p. 101); further,

"It is, however, not less obvious, I think, that this curious theory relation of supply and demand to explain the level of the market value itself is absolutely false. Its reasoning rests, as is often the case with Marx, on a play upon words." (Böhm-Bawerk, 1949, p. 94) Also,

"If however, the law of value has no real influence at all on a chimerical 'aggregate value of all commodities taken together,' there can be no further application of its influence to other relations, and the whole logical series which Marx endeavoured to work out with such seeming cogency hangs therefore in the air." (Böhm-Bawerk, 1949, p.57) See also (1949, pp. 79, 111) for further extensions on Say's dictum.

22 If a self-taught and constrained Utopian citizen like

"Our friend Weston accepts the Latin proverb that repetitio est mater studiorum, that is to say, that repetition is the mother of study, and consequently he repeated his original dogma again and under the new form," (Marx, 1973, p. 25) why should Professor Morishima who is not -as far as we know- an autodidact refrain from reciting once more the precocious tracts of Jean Baptiste Say, considerably dilated already by Böhm-Bawerk, posing himself as a contemporary interpreter of Marx? We search in vain for a disproof in Professor Morishima's most enlightened contributions as far as the "value of theory" -or its subsequent permutations- are concerned.

After having eliminated the different labourers with different skills and intensities, von Bortkiewicz, duly followed by Sweezy, Morishima &c.<sup>23/</sup> replaces the reduction of compound to simple labour with an absurdity: one single labourer. They succeed in their failure in so far as they presuppose one isolated and unique labourer. Likewise, they cannot refer to the labour embodied in the value of the commodity, without implicating themselves in the value of the quantity of labour used in the production of the commodity, vulgo wages, moreover unique: a sole wage rate.<sup>24/</sup>

As for the theoretical constraints of "all labour homogeneous" to use Sweezy's implicit words on behalf of Hicks, or the disregard for the existence of workers with different "wage-rates" by von Bortkiewicz; or Morishima's "all labour is homogeneous" - "so that there is no problem of 'heterogeneous concrete labours'", they share the same deformation that Marx observed in Proudhon:

"In the automatic workshop, one worker's labour is scarcely distinguishable in any way from another worker's labour: workers can only be distinguished one from another by the length of time they take for their work. Nevertheless, this quantitative difference becomes, from a certain point of view, qualitative, in that the time they take for their work depends partly on purely material causes, such as physical constitution, age and sex; partly on purely negative moral causes, such as patience, imperturbability, diligence. In short, if there is a difference of quality in the labour of different workers, it is at most a quality of the last kind, which is far from being a distinctive peculiarity. This is what the state of affairs in modern industry amounts to in the last analysis. It is upon this equality, already realised in automatic labour, that M. Proudhon wields his smoothing-plane of 'equalisation,' which he means to establish universally in 'time to come!'" (1978, pp. 48, 49)

The above quoted "modern" interpretations of Marx would coincide -if there was to be any coincidence, in a most worthy desire of "equalisation" which they devote themselves to popularize. This cannot be taken as a successful enterprise in view of the indiscriminate and spurious presuppositions they uphold, and the elementary knowledge of Proudhon displayed.<sup>25/</sup>

23 "An hour of skilled work produces more value than an hour of ordinary labour. This is a complication that we can avoid by setting out the argument in terms of a model in which all workers are alike." (Robinson & Eatwell, 1974, p. 31)

24 "The only price in the system [since there is only one commodity] is the corn price of labour time—the real- wage rate." (Robinson, 1974, p. vii)

25 "The value of labor power is the same for all workers because it is the abstract labor time needed to reproduce the laborer. By definition

Leaving aside the enthusiastic vulgarization that Proudhon has undergone, let us return to Marx who reminds us that

"The distinction between higher and simple labour -skilled and unskilled labour, rests partly on mere illusions, or at any rate on distinctions which have long ago lost their reality, and only survive by traditional convention; and partly on the helpless state of some portions of the working class -a state which prevents them from insisting like the rest on the full value of their labour power. Accidental circumstances have so great an effect that these two forms of labour change places."  
(1908, p. 157n.)

While fortuitous circumstances cause considerable variations in the process in which different qualities and intensities of labour undergo a necessary and unavoidable reduction for their equalization and comparison, that is, the process might assert itself with difficulties, but nevertheless, it has to occur:

"On the other hand, it is impossible to avoid in every value-creating process, reducing skilled labour to average social labour, for instance, one day skilled labour to six days of unskilled labour, and so on(ii)

(ii) 'When reference is made to labour as a measure of value, it necessarily implies labour of one particular kind...the proportion which the other kinds bear to it being easily ascertained,'  
(Outlines of Political Economy, London, 1832, pp. 22 and 23)."  
(Marx, 1908, p. 157)

Therefore, in spite of the hindrances that sections of the working class might confront in order to sell their capacity to labour for all its value, in spite of obsolete conventional practices, the reduction to simple from compound labour has to take place. Next, Marx proceeds to refresh the memory of the reader that he is proceeding in his investigation considering average social labour, once it has been unavoidably reduced; once it has undergone such conversion into simple labour, while he has already exposed how and why this reduction process takes place.

of the social nature of value this does not vary from worker to worker.<sup>23/</sup>

(23) Questions can be entertained about the validity of this Proudhonian statement. In the first place, there is the matter of skills and skilled workers, the value of whose labor power is greater than that of unskilled workers. This difficulty can, perhaps, be handled within Marx's framework. A more serious problem is the existence of structured labor markets as an apparently fundamental feature of the current stage of the capitalist mode of production. Marx should read: Proudhon predicted a trend toward the homogeneity of labor, instead the trend may be toward duality [?]."  
(Gerstein, 1976, p. 263; emphasis added)



"We thus save a superfluous operation, and simplify the analysis by assuming that the labour employed by the capitalist is unskilled labour." (Marx, 1908, p. 157)

It has been exposed that the process of qualitative equalization of labours unavoidably takes place. Not as a distinction which is drawn -commonly or individually- by the labourer himself. On the contrary, it is the result of the materialization of the different qualities of labour in the commodities, through which the above process of equalization with major or minor obstructions, takes place.

#### 4. The fetishism of the commodity in von Bortkiewicz and Walras

Vulgar economics operates in the form of illusionism. Its upholders speak of an assumed essence of the commodity with which it is identical.

According to von Bortkiewicz and Walras, the consumer relates himself individually with the commodities, establishing personal relations with such "goods" to estimate their worth. They do not regard them as simple, material objects which are the product of social labour and apt to fulfil a social need. On the contrary, they worship the commodities, where they pretend to have found the absolute, the "absolute value", as entangled as it is a personal attribute. Furthermore, they have engaged themselves in conjuring up a duality, i.e., "absolute value", and value self-identical to prices.

Positively, they see sprouting off a commodity -without providing us with any proof- an indefinite number of incommensurable indexes or numéraires from each commodity in its isolated individuality, assuring us that commodities have in fact an intrinsic content that could make them burst into dancing,<sup>1/</sup> driven on -as it were, by their own thrust, and urged on by "absolute value".

We are assured that -in the material relations between men-, the commodities are justly exchanged through mere barter, mediated by normative or ethical standards.

In both "positive" and "normative" performances, following their dualism, we are told that proportionality ought to rule and equilibrium must pervade. Within this exquisite conception, it is presupposed that all material objects (including commodities) have

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1 "It is clear as day that man by his activity changes the form of natural materials in such a manner as to make them useful to himself. The form of wood, for example, is changed when we make it into a table. Nevertheless, the table remains wood, an ordinary thing which may be seen and felt. But when it poses as a commodity it is altogether another matter. At once tangible and intangible, it is not enough that it places its feet upon the ground; it turns over, so to speak, stands upon its head before other commodities, and performs tricks more outlandish than if it took to dancing" (Marx, 1908, p. 37)

their definite measure, whose infringement will cause chaos. In so far as their esteem or affection could become a bit too high and sublime, or it can dare fall to the other extreme of minimum, in the intuitive apprehension by the individual, they fortunately reach a mean. Mediocrity is restored, havoc is avoided and the "general (economic) equilibrium" between supply and demand -ruling through indexes which for von Bortkiewicz and Walras constitute values or prices- is to be achieved.

Through these two ambiguous notable feats and the eternal rule of proportionality, vulgar economics tries to cover up the most palpable reality that surrounds it:

"In general, objects of utility only become commodities because they are the products of private labours, carried out independently of each other. The sum total of these private labours forms social labour. As the producers only come into contact by means of the exchange of their products, so the social character of their private labours only appears within the limits of that exchange; or, rather, private labours are in reality only manifested as divisions of social labour by the relations which exchange establishes among the products of labour, and indirectly among the producers. It follows that, for the latter, the relations of their private labours appear to be what they really are, i.e., not as the immediate social relations of men in their labours, but rather as social relations of things." (Marx, 1908, p. 38)

Vulgar economics finds self-interested pleasure in denying this incontrovertible reality. With its worship of the abstract man, it saws him in half. The first half becomes a producer-supplier-seller. The second half becomes a consumer-demander-purchaser. It follows, of course, that all other individuals are excluded. Our dual individual practices applied science -to follow Walras' parlance, and makes an appraisal, estimating "absolute value" by means of his own individual "free will"<sup>2/</sup>. Then he makes it "all ethical" and finds a numéraire, an index. Our economist is astonished to find that supply is demand -and vice versa, that consumption is identical to production, that is to say, purchases are sales. He has, of course, first discovered a proportionality between "absolute value" and its putative ciphers, which he calls prices self-identical to values. In other words, he has established proportionality between "applied science" and "moral science", i.e. between "art" and

2 "The fact that man's will is cognitive and free makes it possible to divide every entity in the universe into two great classes: persons and things." (Walras, 1954, p. 62)



"ethics". Once our economist has found the above "general (economic) equilibrium" -"in mind", after considerable exercise of estimation, sensibility etc., towards himself, i.e. in his person-society. Within this intuitive consideration, he rushes to the world to apply his conclusions to the collection of commodities in an "aggregate" sense, to spread and propagate this gospel. What holds for such and such an individual and for an object, is to hold for all the individuals and all the objects in the Walrasian universe of things and men.

Vulgar economics strives to deny the existence of material relations between persons and social relations between things. In turn, they preach personal relations between individuals, i.e. all-ethical relations, and personal relations towards things, i.e. a "positive" reflection. Walras' universe turns out to be Robinson's desert island.

Walras and von Bortkiewicz, for instance, are aghast at the mere thought that money is the exclusive general equivalent., which did not exist in the mental lucubrations of the individual who only knows barter with himself. It is, for them, the imaginary individual who estimates value identical to prices and not the economic agents who "in the higgling and bargaining of the market" are dealing and referring to value in its general equivalent: the money form. Therefore, for both our economists, money is debased. At the same time, all commodities are to be equivalents to themselves and special equivalents of each other, under the control of the "free will" of the sovereign consumer. That is why Walras debases explicitly the franc to nil. And von Bortkiewicz, for his part, decides all by himself, which is "the good serving as a measure of value and of price"<sup>3/</sup>

Marx pours scorn on the sententious erudition which

- i) supplants the commodity by a "good";
- ii) divests the use-value from its material properties;
- iii) allocates a value as a personal attribute of the "good"itself;
- iv) upholds such imaginary intrinsic values as an attribute of man.

Moreover, he reminds us in the quotation which follows, that

- i) no chemist has ever discovered the value in the use-value;
- ii) man realizes the value of the commodities only in a social

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<sup>3</sup> 1952, p. 10.

process, i.e. in a process of exchange.

"If commodities could speak they would say: -'Our Use-value may be of interest to men; but for ourselves, as so many objects, we laugh at it. That which we look at is our value. Our relations among each other as objects of sale and purchase prove it. We only stand face to face with each other as Exchange-values.' The economist thinks he interprets the mind of the commodity when he says: -'Value is a property of things, riches, of man. Value, in this sense, necessarily implies exchange; riches do not'(xx). 'Riches (Use-values) are the attribute of man, value is the attribute of commodities. A man or a commodity is rich, a pearl or a diamond is valuable...A pearl or a diamond is valuable as a pearl or diamond'(yy). No chemist has yet discovered Exchange-value in a pearl or diamond. The economists who have discovered or invented chemical substances of this kind, and who assume certain pretensions to profundity, find that the Use-values of things belong to them independently of their material properties, while their value belongs to them as many objects. That which confirms them in this opinion is the strange circumstance that the Use-value of things is realised for men without exchange, that is, in a direct relationship between the thing and the man; while their value, on the contrary, is only realised in exchange, that is, in a social relationship. Who does not here call to mind the good Dogberry, and the lesson he gave to Seacoal: 'To be a well-favoured man is a gift of fortune; but to write and read comes by nature.'?(zz).

(xx) Observations on some verbal disputes in Political Economy, especially relating to Value and Supply and Demand (London, 1821)

(yy) S. Bailey, p. 165,

(zz) The author of the Observations, and S. Bailey, accuse Ricardo of having made Exchange-value (a thing purely relative) something absolute. On the contrary, he has referred the apparent relationship which these objects, such as the pearl and the diamond, possess as Exchange-values, to the true relation hidden behind their appearance -to their relationship as simple expressions of human labour. If the partisans of Ricardo have only answered Bailey in a coarse and inconclusive manner, it is because they have not found, even in Ricardo himself, anything which explains the intimate relation which subsists between value and the form of value, i.e. Exchange-value." (Marx, 1908, pp. 47, 48)

Who fails here to see the personification of von Bortkiewicz and Walras in the good Dogberry, taking us for stupefied night-watchers? We have been told by them that

i) value is a numéraire, a sign, an index belonging to the commodities when exchanged;

ii) "absolute value", i.e. use-value or riches, is an attribute of man, either because it has been produced in an "intrinsic" time, or because it is to be consumed, and its rareté is to be estimated.

Let us quote them in full:

i) "value is merely the index of an exchange relationship"<sup>4/</sup>, hence a purely relative. "It would even be possible in an extreme case to abolish value altogether by abolishing exchange."<sup>5/</sup> "Value, in this sense, necessarily implies exchange"; "Value in exchange when left to itself arises spontaneously in the market"<sup>6/</sup>, i.e. "Value is a property of things".... "Value in exchange is a property which certain things possess"<sup>7/</sup>.

ii) as for use-value, i.e. "absolute value" or riches, it is a "property" and "attribute" of man. As a property, "the so-called 'absolute value'" (an absolute phenomenon) "is identical with the quantity of labour employed in its production"<sup>8/</sup>, which does not necessarily implies exchange. As an attribute, "It is only with respect to a given individual that we can define rareté";<sup>9/</sup> "Rareté is personal or subjective";<sup>10/</sup> "These raretés which are indeed absolute and not relative, are nevertheless subjective or personal and not physical or objective. They are in us and not in things"<sup>11/</sup>.

While von Bortkiewicz has not been particularly explicit in substituting use-value for "absolute value", Walras further elaborates on this point, precised as follows:

"Thus value in exchange remains essentially a relative phenomenon which is always caused by rareté, the one and only absolute phenomenon. <sup>1/</sup>

(1) This distinction between value in exchange, which is relative and objective, and rareté, which is absolute and subjective, is a rigorous expression of the difference between value in exchange and value in use." (Walras, 1954, p. 178)

Paradoxically enough, it is the material qualities of the use-value that constitutes it -which realize themselves without undergoing a process of exchange between the man and the thing-, while value is realized in a process of exchange. This fact does not stop our Dogberries from claiming that the use-value, i.e. "absolute value" is independent of its material properties, while they assert that value is inherent to it.

4 von Bortkiewicz, 1952, p. 5.

5 Walras, 1954, p. 69.

6 Walras, 1954, p. 83.

7 Walras, 1954, p. 83.

8 von Bortkiewicz, 1952, p. 5.

9 Walras, 1954, p. 146.

10 Walras, 1954, p. 146.

11 Walras, 1954, p. 188; emphasis added.



## CHAPTER II

### THE VALUE OF LABOUR IS THE MEASURE OF VALUE

#### I. Its reference to value

Von Bortkiewicz's argument is reduced to the following: "value can have no other meaning than...the index of an exchange relationship",<sup>1/</sup> i.e., the only meaning value can have. At the same time, value can have another meaning; that of the quantity of labour time required to produce a commodity alone, i.e. employed in its production, which is called "absolute value". Simultaneously, values are proportional among themselves as they are to their "absolute values".

We saw that if a mere index is value, as von Bortkiewicz claims, then the value of commodities would be rendered incommensurable. Therefore, it is difficult to understand how he could claim that there is proportionality among different values.

Von Bortkiewicz goes on to speak of such claimed quantity of labour in a single commodity independently of the rest. If this was the case, it seems impossible to determine the so-called "absolute value", as it cannot be compared with other commodities. It would be readily understood that such content could not be known. His claim of proportionality between such dual meaning of value proves groundless.

He proceeds to tell us that

"Labour, or more exactly, wage labour, can be used as such a measure of value 3/. The value of a good A could then be expressed as a certain number of time units of labour, e.g. as 12 days of labour.

3 According to Marx one should talk here not of labour, but of labour power. This point is developed further on." (1952, p. 5)

For the sake of continuity of exposition, and since von Bortkiewicz returns to this question of labour power later on, then, for the moment we shall restrict ourselves to pursuing his illustrated argument.

Here, he is informing us that:

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<sup>1</sup> 1952, p. 5.

- i) "Labour...can be used as such a measure of value";
- ii) " $\sqrt{W}$ age-labour...can be used as such a measure of value".

As can be seen, he is advancing two claims simultaneously.

To proceed in order, we will consider in this chapter the plausibility of i) above, which moreover, is to be exactly enough for him, as we leave ii) to be considered in the next chapter.

Let us carefully note that von Bortkiewicz is claiming that labour by itself can be used as a measure of value. Not labour in so far as it is materialized, embodied in commodities; but labour as such, viz., the labourer himself.

Therefore, by using labour "as such a measure of value", he is assuming that there is such a thing as "the value of labour." In doing so, he implies that labour has got value.

Now, it can be contested that von Bortkiewicz ever put forward the following dogma: "The value of labour is the measure of value." As a matter of fact, he has never advanced it explicitly. Nevertheless, we have shown that he keeps it as an implicit premise. In order to take full advantage of his notions, we have brought it out from his conclusions.

At the best, von Bortkiewicz put upon himself the unfulfilled task of proving that labour has value. Or worse, if he was to claim to be speaking under Marx's authority, he ought to have provided at least one single citation, before bestowing further imputations <sup>2/</sup>.

Let us consider "good A". To the question as to what is the value of it, von Bortkiewicz replies that it could be "expressed as a certain number of time units of labour, e.g. as 12 days of labour". In other words, that the "value of labour" can be used to determine the value of "good A". But how, then, is the value of such "good A" determined? In its turn, by the "value of labour".

"Thus we begin by saying that the value of labour determines the value of commodities, and we wind up by saying that the value of commodities determines the value of labour. Thus we move to and fro in the most vicious circle, and arrive at no conclusion at all."  
(Marx, 1973, p. 30)

On top of von Bortkiewicz's success in measuring the value

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<sup>2</sup> Long ago, von Bortkiewicz seems to have undertaken the procedure of attribution rather than that of simple compilation, for Marx says:

"Labour is the substance, and the immanent measure of value, but it has itself no value. <sup>1/</sup>

(1) 'Labour, the exclusive standard of value...the creator of all wealth, no commodity.' (Th. Hodgskin, l.c.p.186)" (Marx, 1918, p. 588)

of "good A," he forgot to prove the implicit premise in his argument, i.e., that labour has got value.<sup>3/</sup> Therefore, his conclusion turns out to be a wanton assertion.

Keeping with von Bortkiewicz's erroneous assumptions, he has claimed that the index for which a commodity would exchange (one of his dual meanings of value) is proportional to the "quantity

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3 "All the products, therefore really possess a definite value before entering the market. The market cannot decide their values but only their actual prices which may diverge from their values (or production prices) under unbalanced supply and demand conditions. A certain circularity characterises the definition of the values (or value creating powers) of skilled and unskilled labor because the theoretical prescription is based on the eigenequation approach." (Bródy, 1970, p. 87; emphasis added)

We pass by such curiosities in the passage as are of no bearing on our present purpose; i.e., the eigenequation approach. We might overlook as secondary, that Bródy presupposes the value of all products, as if to presuppose one was not enough, and that in his confusion he takes a product for a commodity. Quite apart from these blunders, he first determines the value of commodities by the "values...of skilled and unskilled labor"; only to attest his own platitude, i.e. the value of labour, moreover in an abundant multiplicity.

"On the other hand, the attempt to explain such expressions [the values of labour] as merely poetic license [value creating powers] only shows the impotence of the analysis. Hence, in answer to Proudhon's phrase; 'Le travail est dit valoir, non pas en tant que marchandise lui même, mais en vue des valeurs q'on suppose, renfermées puissancielllement en lui. La valeur du travail est une expression figurée,' &c., I have remarked: 'Dans le travail-marchandise qui est d'une réalité effrayant, il (Proudhon) ne voit qu'une ellipse grammaticale. Donc, tout la société actuelle fondée sur le travail-marchandise, est désormais fondée sur une license poétique, sur une expression figurée. La société veut-elle 'éliminer tous les inconvénients,' qui la travaillent, eh bien! qu'elle élimine les termes malsonnants, qu'elle change de langage, et pour cela elle n'a qu'à s'adresser à l'Academie pour lui demander une nouvelle édition de son dictionnaire.' (Karl Marx. Misère de la Philosophie, p. 34, 35)" (Marx, 1918, p. 588n)

While l'Academie (in France) might have been sluggish in its activities, there is no reason why modern economics should not divulge poetic licenses akin to "value creating powers". Elliptically,

"Labour, then, has the unique quality of producing more than its own value." (Robinson & Eatwell, 1974, p. 28; emphasis added)

Whence this surplus value; this surplus labour?

"It is easy enough to see that work creates wealth while nature provides the kindly fruits of the earth, but there are also profits." (Robinson & Eatwell, 1974, p. 2)

But where do profits come from? Inexorably,

"'Chaque travail doit (this appears also to be part of the droits et devoirs du citoyen) laisser un excédant.' Proudhon." (Marx, 1918, p. 565 n.)



of labour employed in its production" (his other meaning of value, viz., "absolute value"). While we saw in the preceding chapter how far he could go with his dual meanings of value, we simply confirm here that in addition, such proportionality would make him expose a preposterous error as soon as he has to face the existence of various labourers, with different skills.

Once we have seen that von Bortkiewicz's dual meaning of the quantity of labour time employed, and the labour time employed as such a measure of value lead us nowhere, let us furthermore see to what results we would arrive if we were to use his prescribed measure.

"The same quantity of labour will represent, for example, in a favourable season, eight bushels of wheat, and in an unfavourable season only four bushels; the same quantity of labour will produce more metal in a rich mine than in a poor one, and so forth."  
(Marx, 1908, p. 6)

This is clear and straightforward. But now let us return to von Bortkiewicz in an attempt to further learn from his dual meanings of value. Let us consider the case of two mines, both producing say, iron ore. Suppose that mine A is richer than mine B, while the same quantity of labour is applied to both. What would be the value of the produce? The very same, von Bortkiewicz must say, because the quantity of labour employed in the production of the rich mine is just "identical with the quantity of labour employed in its  $\left[ \begin{array}{l} \text{the} \\ \text{poor mine's} \end{array} \right]$  production". Different, must von Bortkiewicz say, as the same "quantity of labour employed in its production" would obtain unequal amounts of "goods." We cannot see any conclusive "proportion" claimed by von Bortkiewicz between the actual quantity of labour employed in a commodity, and its value. The only virtue of his "proportionality," is that it becomes transformed into a disproportion. Disproportion both of the values of different "goods" among each other, and in relation to the "absolute values".

At what frail conclusions von Bortkiewicz would have arrived were we to follow his own assumptions. Meanwhile he has exposed a most peculiar ability. That of using as a measure what he intends to measure <sup>4/</sup>. In other words, by measuring the value of

<sup>4</sup> A similar pitfall is found in de Brunhoff (1973):

"If a ton of iron is worth two pounds of gold money, both being produced with eight hours of labour, what happens when the labour time necessary to produce gold becomes twice as much? A ton of iron is then worth only one pound of gold. The relation of values remains

commodities with labour time as such, i.e. "as 12 days of labour."

While for von Bortkiewicz proportionality was at all events what he was aiming at, let us help him to fulfil it as we quote Engels to keep proportionality, at least between authors.

"But let us look a little more closely at the doctrine of equivalence. All labour time, the porter's and the architect's, is perfectly equivalent. So labour-time, and therefore labour itself, has value. But labour is the creator of all values. It alone gives the products found in nature value in the economic sense. Value itself is nothing else than the expression of the socially necessary human labour materialized in an object. Labour can therefore have no value. One might as well speak of the value of value, or try to determine the weight, not of a heavy body, but of heaviness itself, as speak of the value of labour, and try to determine it. Herr Duhring dismisses people like Owen, Saint-Simon and Fourier by calling them social alchemists. By his logic-chopping over the value of labour-time, that is, of labour, he shows that he ranks far beneath the real alchemists. Now let the reader fathom Herr Duhring brazenness in imputing to Marx the assertion that the labour-time of one person is in itself more valuable than that of another, that labour-time, and therefore labour, has a value -to Marx, who first demonstrated that labour can have no value, and why it cannot!" (1976, p. 256).

If different commodities were expressed by indexes or by labour time as such, their comparisons as commodities would, besides being irrelevant, be impossible in so far as they would be unfathomable. They could just be expressed as indexes and accounted

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accurate, but in so far as the exchange of equivalents is concerned, the ton of iron, which retained its initial exchange value, is depreciated because of the change in value of gold money, a non-immanent measure of value, is a good measure in so far as it retains the relation of exchange values [should read: exchange value], but it is a bad measure (from an 'immanent' point of view) in so far as it imposes on the ton of iron a relation of equivalence which depreciates it in the exchange process. And it is impossible to resolve this problem: the money form cannot be neutral, given an economic point of view, since money is a social relation; so it cannot yield transparency [?] to the commodity circulation." (p. 427; emphasis added)

It is unfortunate that de Brunhoff attempts to see in money not a commodity with a distinctive use-value and value. Instead, she ascribes to money two separate "measures" of value. It did not take her long to discover that to use as a measure what she intends to measure, viz., labour time (from "an 'immanent' point of view" only), "it is a bad measure". But alas! a "non-immanent measure of value, is a good measure". Who can fail to remember M. Proudhon in his dualism?

"For him, M. Proudhon, every economic category has two sides -one good, the other bad. He looks upon these categories as the petty bourgeois looks upon the great men of history: Napoleon was a great man; he did a lot of good; he also did a lot of harm.

The good side and the bad side, the advantages and the draw-backs, taken together form for M. Proudhon the contradiction in every economic category."

(Marx, 1978, pp. 104, 105)

as indexes, i.e. joined; and the numeral one is put forward as the sole measure of value. An index is, after all, only an index. What else could it be? Hence, von Bortkiewicz is dealing with a "standard of value" under the pretence of measuring value. And as if this superannuated bewilderment was not sufficient,<sup>5/</sup> von Bortkiewicz has presented us with a double "standard of value", i.e. value -an "index", and value -an "absolute". Or to be more precise, with two sorts of double standards, according to the multifariousness of values we have already exposed for him. A multifariousness which, as we were told, "holds good for any measure of value."

## 2. Its reference to price

We have seen that for von Bortkiewicz, every commodity reflects its own value. For him it is not only that commodities cannot relate to each other to express their value in the use value of another. It is furthermore unnecessary for von Bortkiewicz, as each one ought to realize its own quantity of labour in it employed. Besides, it is also impossible to refer to one determined commodity to which another one relates to express its value. This is because von Bortkiewicz has replaced the exchange value of the commodity, with a cornucopia of indexes.

For von Bortkiewicz, in contradistinction to Marx, price is not the value of a commodity translated into monetary language.<sup>6/</sup> Once von Bortkiewicz has presented each commodity as a measure of its own value, he is forced to refer to prices as self-identical to values, while the universal equivalent form, money, has been abolished. At the same time, the contradiction between money and commodity is formally wiped out of existence.<sup>7/</sup> That is why he has spoken of "the good serving as a measure of value and of price",

5 "In English works the confusion between 'measure of value' and 'standard of value' is inexplicable. The functions, and consequently their names, are constantly misplaced." (Marx, 1908, p. 62n)

6 "Price, taken by itself, is nothing but the monetary expression of value." (Marx, 1973, p. 39)

7 "After this we can appreciate the civil socialism which seeks to perpetuate the production of commodities, and at the same time abolish 'the opposition of commodities and money,' or in other words, money itself, for it only exists in that opposition. On this subject vide my Critique of Political Ec. p. 61 et seq." (Marx, 1908, p. 51n)



which for him, "holds good for any measure of value". Or more precisely, for "any measure of value" and "of price", as seen before.

Let us return once more to "good A". After having established the precedent that it can be both expressed and measured "as 12 days of labour", he claims that "the value of  $\int$ good $\int$  A would be 48 Mark,"<sup>8/</sup> informing us circuitously that the "value of labour" is 4 Mark a day.

To the question as to what is the value of "good A", von Bortkiewicz would answer in his customary good sense, that it is "as 12 days of labour" -if labour is used "as such a measure of value". That it is 48 Mark, if we use the Mark as a measure of value, and that it is also 48 Mark if the measure "of price" is the Mark. Once more, we confirm von Bortkiewicz's revelations with three different sorts of value for one single "good". Once again, three yet one.

We have to render tribute to von Bortkiewicz's ability, as he finds that he only needs three sets of values to determine the value of one commodity, which he calls "good". A set of indexes which he calls "time units of labour", a second set of indexes which he calls values, and on top of it, a third set which he calls prices. It would be recognized that he is providing more sorts of answers than the problem requires, i.e. the value of commodity "A". Or put in another way, von Bortkiewicz comes about with three sorts of different questions to provide, hopefully, one single answer.

But von Bortkiewicz is redundant enough with the three "commodities" he has presented to us so far. Namely "A", labour, and Mark. Meanwhile, we can do away with the first one, which looks like an intriguing and anonymous guest in a ménage à trois. Let us proceed to consider the other two.

To the question as to what is the value of 1 Mark, von Bortkiewicz would have answered that it is as  $\frac{1}{4}$  day of "labour", only to proceed telling us that the "value of labour" is 4 Mark a day. But we already know how he determines the value of commodities; by the "value of labour" -and viceversa. While for him labour itself is a commodity, the "value of labour" in its turn would be equal to the value of 1 day of "labour" expressed as "days of labour" -if there was any doubt. Hence "value is value", which in his original runs as the consecrated formula: "absolute value", "identical to the

8 von Bortkiewicz, 1952, p. 6.

quantity of labour employed in its production".

The reader would realize that with the erudition of providing more than one "standard of value" -in fact three sets so far-, von Bortkiewicz is left with no standard at all.

As could have been expected, and as we shall show presently, von Bortkiewicz was not particularly a pacesetter in reaching the "value of labour" and indulging himself in its applications, whose rigour we have had the opportunity to test. At the bottom of this dogma rests the pious wish that if every commodity was to reflect the quantity of labour employed in it, the value, and hence the price of the commodities would display, proportionately, the quantity of labour materialized in it. Strangely enough, it was Marx himself who refuted this doctrine sustained by an opinionated Utopian.

"Let us see what advantage M. Proudhon draws from this proportional relation.

Everyone knows that when supply and demand are evenly balanced, the relative value of any product is accurately determined by the quantity of labour embodied in it, that is to say, that this relative value expresses the proportional relation precisely in the sense we have just attached to it [ \* ]. M. Proudhon inverts the order of things. Begin, he says, by measuring the relative value of a product by the quantity of labour embodied in it [ viz., "absolute value" in von Bortkiewicz ], and supply and demand will infallibly balance one another. Production will correspond to consumption, the product will always be exchangeable. Its current price will express exactly its true value. Instead of saying like everyone else: when the weather is fine, a lot of people are to be seen going out for a walk, M. Proudhon makes his people go out for a walk in order to be able to ensure them fine weather." (1978, pp. 54, 55)

Von Bortkiewicz has presupposed that the product of independent and private producers -or groups of producers, is its very opposite, a directly social product. With the aid of this assumption he would find, surprisingly, that demand is a mere reflection of production, alongside its implicit proportionality. As if the production of commodities based on private and independent producers -who relate among themselves through the products of labour having to be validated in the market as general social labour- was not a palpable fact of capitalism.<sup>9/</sup>

\* "In the first place, the relative value of products being determined by the comparative amount of labour used in the production of each of them, proportional relations, applied to this special case, stand for the respective quota of products which can be manufactured in a given time, and which in consequence are given in exchange for one another." (Marx, 1978, p. 54)

9 It is not difficult to realize that von Bortkiewicz's assertions have the intention of being wholeheartedly applied to all modes of production and not to any particular social formation. It is as if he had lost sight of bourgeois production while he is actively engaged in denying its inherent contradictions.

As von Bortkiewicz was far from being the only one in upholding the tenets refuted long ago by Marx, let us turn to other propounders of these insights. We shall turn to Proudhon once again, and the originality of his notions.

"John Gray was the first to set forth the theory that labour-time is the direct measure of money in a systematic way.\*

\* John Gray, The Social System. A Treatise on the Principle of Exchange, Edinburgh, 1831, Cf. the same author's Lectures on the Nature and Use of Money, Edinburgh 1848. After the February Revolution, Gray sent a memorandum to the French Provisional Government in which he explains that France did not need an 'organisation of labour' but an 'organisation of exchange', the plan for which was fully worked out in the Monetary System he had invented. The worthy John had no inkling that sixteen years after the publication of The Social System, the ingenious Proudhon would be taking out a patent for the same invention." (Marx, 1970, p. 83)

In other words, John Gray was the first one to expose systematically that the price of a commodity, i.e. its exchange value as expressed in terms of money, was a reflection of the labour time contained in it. Von Bortkiewicz, for his part, directly identifies labour time with what he calls value. Meanwhile, every commodity, as a special equivalent to itself is claimed to be immediately money.

"Every commodity is immediately money; this is Gray's thesis which he derives from his incomplete and hence incorrect analysis of commodities. The 'organic' construction of 'labour money' and 'national bank' and 'warehouses' is merely a fantasy in which dogma is made to appear as a law of universal validity. The dogma that a commodity is directly money or that the particular labour of a private individual contained in it is immediately social labour, does not of course become true because a bank believes in it and conducts its operations in accordance with this dogma. On the contrary, bankruptcy would in such a case fulfil the function of practical criticism. The fact that labour money is a pseudo-economic term, which denotes the pious wish to get rid of money, and together with money to get rid of exchange-value, and with exchange-value to get rid of commodities, and with commodities to get rid of the bourgeois mode of production, -this fact, which remains concealed in Gray's work and of which Gray himself was not aware, has been bluntly expressed by several British socialists, some of whom wrote earlier than Gray and others later.\* But it was left to M. Proudhon and his school to declare seriously that the degradation of money and the exaltation of commodities was the essence of socialism and thereby to reduce socialism to an elementary misunderstanding of the inevitable correlation existing between commodities and money.\*\*

\* See, e.g., W. Thompson, An Inquiry into the Distribution of Wealth, London, 1824; Bray, Labours's Wrongs and Labour's Remedy, Leeds, 1839.

\*\* Alfred Darimon, De la réforme des banques, Paris, 1856, can be regarded as a compendium of this melodramatic monetary theory." (Marx, 1970, pp. 85, 86)



In the particular case of Proudhon, we have seen how he prophesyzes proportionality before the commodities reach the market. In other words, he restricted himself to assume it.

And if an economist and propagandist of the stature of Proudhon gained admirers and professed followers particularly during his lifetime; if he even attempted to put into practice this embellished shadow of bourgeois society, and with his faith and obduracy opened an Exchange Bank whose fiasco proved its sound base,<sup>10/</sup> why could von Bortkiewicz in this century not sit sprawled in his chair, and from it pledge his prestige in bringing Proudhon up to date in the name of interpreting Marx? Why was he not to find success among vulgarizers and comentators across the board, asserting in fact, that the Utopia of Proudhon is, for Marx, the reality of capitalism? The tragic comedy of M. Proudhon is the opéra bouffe of von Bortkiewicz. The "naive" inconclusiveness of a socialist dreamer are turned into modern means of impersonation, with congratulations and celebrations all around.

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10 Referring to the theory of exchange of commodities by means of labour time as such, Marx refers to its practical applications as follows:

"'Mr. Bray's theory, like all theories, has found supporters who have allowed themselves to be deluded by appearances. Equitable-labour-exchange bazaars 23/ have been set up in London, Sheffield, Leeds and many other towns in England. These bazaars have all ended in scandalous failures after having absorbed considerable capital. The taste for them has gone for ever. You are warned, M. Proudhon! [Note by Marx.] It is known that Proudhon did not take this warning to heart. In 1849 he himself made an attempt with a new Exchange Bank in Paris. The bank, however, failed before it had got going properly: a court case against Proudhon had to serve to cover its collapse. [Note by F. Engels to the German edition of 1885.]"

23 Equitable-labour-exchange bazaars were organized by Owenites and Ricardian socialists (such as John Gray, William Thompson and John Bray) in various towns of England in the 1830s for fair exchange without a capitalist intermediary. The products were exchanged for labour notes, or labour money, certificates showing the cost of the products delivered, calculated on the basis of the amount of labour necessary for their production. The organizers considered these bazaars as a means of publicizing the advantages of a non-capitalist form of exchange and a peaceful way -together with cooperatives- of transition to socialism. The subsequent invariable bankruptcy of such enterprises proved their utopian character [Ed.]" (1978, p. 72 n.) We would only add that Walras engaged himself during his "bohemian youth" as the managing director of one such institution: a cooperative producers' bank. It should be guessed by now what was the outcome, in 1868, of the practical applications of his notions.

## C H A P T E R   I I I

### THE VALUE OF WAGE LABOUR IS THE MEASURE OF VALUE

#### I. Wages determine prices

Let us return to von Bortkiewicz's assertion, as we quote it in full:

"Labour, or more exactly, wage-labour, can be used as such a measure of value <sup>3</sup>/. The value of a good A could then be expressed as a certain number of time units of labour, e.g. as 12 days of labour. This would mean that good A or its equivalent, could pay the wages for 12 days of labour. If the value of another good B is 6 days of labour, and if therefore 2B are given in exchange for A, then we must deduce, according to the Law of Value, that A requires for its production twice the labour required for the production of B, or, in other words, that the absolute value of A is double the absolute value of B. These absolute values would, however, be expressed not by 12 and 6 days of labour respectively, but, if we assume the rate of surplus value to be 50%, for instance, by 8 and 4 days of labour respectively. If wages are 4 Mark a day, the value of A would be 48 Mark, but the production of A would have required the capitalist to spend only 32 Marx on wages.

This much needed to be said in order to avoid misunderstandings due to the multiple significance of the concept of value.

<sup>3</sup> According to Marx one should talk here not of labour, but of labour power. This point is developed further on."  
(von Bortkiewicz, 1952, pp. 5,6)

In the last chapter we saw that if the "value of labour" is made the measure of value, this would just regress us to the epoch-making premise that value is value. But here, von Bortkiewicz is providing us with a more exact alternative, as "Labour, or more exactly, wage labour, can be used as such a measure of value" (emphasis added). So as to follow his advice, from now on we will adhere to this more exact precept of his.

By using wage labour as such a measure of value, we are told that "The value of good A could then be expressed as ... 12 days of labour. This would mean that good A or its equivalent, could pay the wages for 12 days of labour."

This means that "good A" can actually pay for 12 days of labour in the form of wages - "If wages are 4 Mark a day, [as] the value of A would be 48 Mark". An exchange of equivalents would take

place. In this case, wage labour will part with 48 Mark product of 12 days of toil at 4 Mark a day. On the other hand, the capitalist mentioned above, would exchange "good A" at its value which amounts to 48 Mark. Exeunt. But this at once gives rise to a very "serious" hitch. Wage labour could not produce any surplus for the referred capitalist. The 4 Mark a day -or 48 Mark for 12 days of labour- would not be converted into capital. If this prescription of von Bortkiewicz was to apply to the guild of capitalists as a whole, the basis of capitalist production disappears.

On the basis of plain common sense, it is difficult to understand so far, how the capitalist of von Bortkiewicz's account could have become any richer. By exchanging "good A" at its value, viz., 48 Mark, this enables him to pay wage labour 48 Mark -12 days at 4 Mark a day. The capitalist would find himself at the end as he was at the beginning. Or worse, if the capitalist could not exchange "good A" for 2 "units" of "good B", he would have found himself to relinquish 48 Mark to wage labour without recovering them. Therefore, if the capitalist gets the value of "good A", viz., 48 Mark, it could explain, at the most, why this enterprising character has not impoverished himself, but never how he becomes any richer.

It is a different question, of course, to know why wage labour finds itself compelled to surrender 12 days of labour to the capitalist, instead of producing "good A" on his own account. But this is so evident for von Bortkiewicz, that requires no explanation whatsoever.

Von Bortkiewicz, for his part, was not entirely satisfied with the above solution implicit in his adumbrations. To be fair, he has told us above that the capitalist gets richer in so far as "the production of A would have required the capitalist to spend only 32 Mark on wages." But this is unfair. If wage labour is to receive for 12 days of labour less than 48 Mark, then 12 days of labour would be exchanged for less than 12 days of labour, viz., for 8 days of labour; and 4 Mark would be given in exchange for less than 4 Mark, viz., for  $2\frac{2}{3}$  Mark a day.

"This equalisation of unequal quantities not merely does away with the determination of value. Such a self-destructive contradiction cannot be in any way even enunciated or formulated as a law."  
(Marx, 1918, p. 587)

It would be of no avail, then, to claim that "If wages are 4 Mark a



day," the capitalist pockets  $1\frac{1}{3}$  Mark a day, paying only 32 Mark at  $2\frac{2}{3}$  a day -for 12 days of labour. This course of action is to be abandoned, first, because von Bortkiewicz has told us clearly that "wages are 4 Mark a day", his working hypothesis, and second, because it would leave such capitalist open to swindling charges which on no grounds whatsoever can constitute the normal way for his enrichment.

There is also the possibility that wage labour is paid 32 Mark because "good A" cost 8 days of labour, as we adhere to von Bortkiewicz claim that "wages are 4 Mark a day". In that case, the capitalist of his account would enrich himself by raising the value of "good A" from 32 Mark to 48 Mark. If the holder of "2B" has done likewise -as far as we know, both the capitalist of his account and the holder of 2B would get richer by selling their wares to each other at a nominal markup. But as both do the same and in alike proportion, the result in the end, is as if they would have exchanged A for 2B -and vice versa, for what their value would be, viz., 32 Mark. The only thing that would happen is that to circulate a commodity value of 32 Mark, they would need a mass of money of 48 Mark. Von Bortkiewicz confirms himself, as in this case, A and B "would, however, be expressed not by 12 and 6 days of labour respectively, but, if we assume the rate of surplus value [sic] to be 50%, for instance, [good A and good B will be represented] by 8 and 4 days of labour respectively." While no surplus could be obtained by this exercise, it would be rather a procedure for impoverishment than for enrichment, as they would have to keep in the idle form of means of circulation a sum of money equal to 50% over the value of the wares they were to exchange.

To sum up, von Bortkiewicz is providing us with two plausible alternatives within his constraints. Either,

i) the value of A and B is 12 and 6 days of labour respectively. So far as we know, "wages are 4 Mark a day".- "This would mean that good A or its equivalent [2B] could pay the wages for 12 days of labour." In which case no surplus would be produced whether for the capitalist owner of "good A" or for the holder of "2B", and the foundation of capitalist production sinks. Or

ii) "Good A" and 2B, "would, however, be expressed not by 12 and 6 days of labour respectively, but, if we assume the rate of surplus value [sic] to be 50%, for instance, [goods A and B are to be

expressed  $\frac{7}{8}$  by 8 and 4 days of labour respectively." Now, "If wages are 4 Mark a day," this would mean that in order to exchange 32 Mark of commodity values against each other, they would engage in the idle sport of requiring 48 Mark to accomplish the same purpose. In spite of the mutual nominal price increase of A and 2B, both the capitalist of his account and the holder of 2B would do each other the favour of circulating 32 Mark in commodity values with a quantity of money that is required to circulate commodities for the value of 48 Mark. Far from obtaining any surplus, a hefty portion of their fortunes would have been unnecessarily diverted as means of circulation in sterile exercise.

Consideration of von Bortkiewicz's alternatives has exposed the ambiguity of his precepts. We are left with the inconsequential result that the magnitude of surplus value is beyond his elucidations. In the guise of speaking of surplus value, he has presented us, instead, merely with a percentage, i.e. an empty rate devoid of determination. While he presupposed it, he is unable to reduce the limits of such percentage to any relation between the magnitude of surplus value and the magnitude of variable capital.

As far as profits are concerned, von Bortkiewicz has nowhere mentioned them. However, the fact that he has done away with constant capital in his above explanations,  $\frac{1}{2}$  would expose that he is confusing a rate of surplus value, moreover ethereal, with a similar rate of profit. He has just spoken about wages -or alternatively, of wages plus an additional percentage, as a determinant of prices. On the other hand, there would be no basis for a redistribution of surplus value in proportion to capital outlay, viz., constant capital and variable capital advanced  $\frac{2}{3}$ . He confirms himself as in his example constant

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1 Let us keep in mind that commodity values have been represented in von Bortkiewicz in the exclusive form of wages; or in wages plus a nominal surcharge in value.

2 As to how little von Bortkiewicz has been understood, is illustrated by the following comment:

"Marx stated that surplus-value originated in production and not in circulation, and that surplus-product  $\frac{1}{2}$  should read: surplus-value represented the surplus  $\frac{1}{2}$  product or unpaid labour of workers. This has been interpreted by many, including Bortkiewicz and other Neo-Ricardians, to mean that profits or the surplus product represent a deduction from the product of labour, and that the capitalist is able to deduct this surplus product because he owns the means of production, without which production is impossible." (Rowthorn, 1974, p. 82) Paradoxically enough, von Bortkiewicz has never expressed or represented

capital itself has been spirited away. He nowhere states the sum of value that the capitalist of his account advanced in order to produce "a good A".

It is not difficult to verify that

"[A]ll the superannuated writers on political economy who propounded the dogma that wages regulate prices, have tried to prove it by treating profit and rent as mere additional percentages upon wages. None of them were, of course, able to reduce the limits of those percentages to any economic law. They seem, on the contrary, to think profits settled by tradition, custom, the will of the capitalist, or by some other equally arbitrary and inexplicable method."  
(Marx, 1973, p. 29)

The depth and consistency of von Bortkiewicz is illustrated, while his rigorous logic is brought to the fore afresh:

"The dogma that 'wages determine the prices of commodities,' expressed in its more abstract terms, come to this, that 'value is determined by value,' and this tautology means that, in fact, we know nothing at all about value. Accepting this premise, all reasoning about the general laws of political economy turns into mere twaddle. It was, therefore, the great merit of Ricardo that in his work on The Principles of Political Economy, published in 1817, he fundamentally destroyed the old, popular, and worn-out fallacy that 'wages determine prices,' [9] a fallacy which Adam Smith and his French predecessors had spurned in the really scientific parts of their researches, but which they reproduced in their more exoterical and vulgarizing chapters.

9 See David Ricardo, On the Principles of Political Economy and Taxation, London 1821, p. 26. The first edition of the book appeared in London in 1817. [Ed.]"  
(Marx, 1973, p. 31)

Far from telling us anything new, von Bortkiewicz has done nothing but repeat himself and the tenets already disposed of by

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the surplus product as "a deduction from the product of labour," as in his example he adheres to the value of wage labour as "4 Mark a day." Would it not be more correct to paraphrase von Bortkiewicz et al. arguing that "profits or the surplus product represent"

- "non-existent products? Besides their real ignorance, it is an apologetic fear of a scientific analysis of value and surplus-value, and of obtaining a result not quite palatable to the powers that be, which drives Roscher and his like to account for surplus-value by warming up the excuses, more or less plausible, offered by the capitalist for his pocketing of surplus value."  
(Marx, 1908, p. 177 n.)

Besides, it is the merit of von Bortkiewicz to have explained, say the production of "good A" and "good B" without means of production whatever, as their value has been explicitly referred to in the exclusive form of wages.



Marx in the name of interpreting him.<sup>3/</sup>

But the inconclusiveness of von Bortkiewicz does not stop here. As if overconcerned with every single distortion that might have slipped in, he returns -as promised, to regard labour power. At the end of his endeavours, he enlightens us as follows:

"It thus runs counter to historical justice to talk as if the confusion -prevailing amongst Marx's predecessors- between the amount of labour embodied in a commodity and the amount of labour equivalent to the commodity, had only been removed by Marx through his substitution of the expression 'labour power' for 'labour'. It is no less wrong to ascribe to this Marxian neologism <sup>135/</sup> the magical power of revealing the law governing the level of wages.

<sup>135</sup> G. Simmel (Philosophie des Geldes, p. 432) rightly calls the introduction of 'labour power' instead of 'labour' a 'matter of terminology'. It is not uninteresting to note that Marx himself speaks of labour as a commodity, e.g. in Elend der Philosophie, to which Engels (Introduction, p. XXV) specially refers. This language -condemned by Marx and Engels- is to be found occasionally also in Das Kapital, e.g. Vol. I, p. 361. Nor should the favourite term 'unpaid labour' really be tolerated if the worker sells, not his labour, but his labour power. Marx seems indeed to have felt this (see Das Kapital, I, p. 545), and if he did not renounce the use of this expression, which from his standpoint is illogical, this can only be ascribed to political purposes [should read: agitational reasons (agitatorischen Gründen)]<sup>7/</sup>." (von Bortkiewicz, 1952, p. 57)

Let us start from the illustrative footnote. For von Bortkiewicz, to "develop" on the point of labour power, means to dismiss it as a "neologism", for which he does not provide any ground. To save appearances, he rushes for an endorsement in this charge.

Although Marx did not explicitly differentiate between the capacity to labour or labour power, and labour as a function, in The Poverty of Philosophy, von Bortkiewicz does not seem to have found any specific example where Marx was taking one for the other, as he -von Bortkiewicz- does. We simply confirm that von Bortkiewicz was well acquainted with Proudhon -at least through Marx.<sup>4/</sup>

To complain against the "term" unpaid labour as an "illogical

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3 Of contrary opinion is Sweezy: "Alone among critics of Marx's theoretical structure, Bortkiewicz grasped the full significance of the law of value and its use." (1946, p. 70)

4 Engels states in this respect that:

"It is hardly necessary to point out that the terminology used in this work [The Poverty of Philosophy] does not coincide with that in Capital. Thus this work still speaks of labour as a commodity, of the purchase and sale of labour, instead of labour power." (1978, p. 19)

expression" is no less than to deny the existence of surplus value. He has not mentioned it so far, while the use of a "rate" or additional percentage, was mentioned only to be withdrawn. To that extent, then he is consistent.

As for what rules the level of wages, von Bortkiewicz has tried to conceal his helpless ambiguity. It is von Bortkiewicz himself that appears to engage in "the magical power" of speaking of a rate of surplus value which aside of being presupposed, was never materialized in any product of labour.

Let us note that so far, von Bortkiewicz's achievement is unique.<sup>5/</sup> As for the law of value, he has been attempting to express it time after time without much success. It looks as if it was elusive for this savant sérieux. None the less, he has presented us in its place with a "scientific discovery" out of Marx's "mind", which turned out to be Proudhon's "constituted value" concisely presented as that "which constitutes the substance of the Marxian Law of Value"<sup>6/</sup>.

To confirm his position, von Bortkiewicz claims that there was a confusion between "the amount of labour embodied in a commodity and the amount of labour equivalent to the commodity." before Marx; that such confusion was not removed by Marx's "neologism" of labour power. And that such confusion ought to continue for us, to abide by "historical justice", i.e. to be fair to Marx's predecessors,<sup>7/</sup> among other things.

What caps von Bortkiewicz?

The capitalist does not confront wage labour in the commodity market. What the capitalist confronts is the wage labourer<sup>8/</sup>. What

5 As should be understood by now, von Bortkiewicz cannot even differentiate between the concrete expenditure of labour in a commodity and the socially necessary labour spend in its production.

6 Von Bortkiewicz, 1952, p. 5.

7 "Classical economy never arrived at a consciousness of the results of its own analysis; it accepted uncritically the categories 'value of labour,' 'natural price of labour,' &c., as final and as adequate expressions for the value-relation under consideration, and was thus led, as will be seen later, into inextricable confusion and contradiction, while it offered to the vulgar economists a secure basis of operations for their shallowness, which on principle worships appearances only." (Marx, 1918, p. 590)

8 "In order to be sold as a commodity in the market, labour must at all events exist before it is sold. But could the labourer give it an independent objective existence, he would sell a commodity and not labour.(1)

(1) 'If you call labour a commodity, it is not like a commodity which is

the labourer sells is his capacity to labour or labour power, and not labour.

"That which comes directly face to face with the possessor of money on the market, is in fact not labour, but the labourer. What the latter sells is his labour-power. As soon as his labour actually begins, it has already ceased to belong to him; it can therefore no longer be sold by him."  
(Marx, 1918, p. 588)

Therefore, in his treatment of labour, von Bortkiewicz seems to be unable to distinguish its capacity to function from the use of such capacity. In other words, between the power of labour to function and the use of that power by labour. Likewise, a confusion between the capacity of criticism and criticism itself has made itself apparent. The result of this process is, that while his power to criticize Marx has not manifested itself, his function is confined to imputing to Marx a series of trivialities, which we have examined before any outright dismissal.

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first produced in order to exchange, and then brought to market where it must exchange with other commodities according to the respective quantities of each which there may be in the market at the time; labour is created the moment it is brought to market; nay, it is brought to market before it is created.' (Observations on some Verbal Disputes, etc., pp. 75, 76.)"  
(Marx, 1918, p. 587)



## CHAPTER IV

### AN ASSORTMENT OF VALUE

Let us sum up the multifariousness of value which von Bortkiewicz has construed so far, and with which he arms himself in order to proceed in his dissertation.

From having stated that "value can have no other meaning", he encounters two different meanings:

"value is merely the index of an exchange relationship and must not be confused with the so-called 'absolute value' of a commodity, which is identical with the quantity of labour employed in its production", 1/

whereby value is:

- i) value -an "absolute";
- ii) value -"merely the index".

In a furtherance, the contingent

"good which serves as a measure of value and of price"2/, was produced only to discover that

- iii) "Price is also, however, like value, the index"3/.

He proceeds to find that value -an "absolute", is tantamount to units of labour time "by themselves":

"Labour, or more exactly, wage labour, can be used as such a measure of value... The value of a good A could then be expressed as a certain number of time units of labour, e.g. as 12 days of labour." 4/

In other words, value -an "absolute", is to become also an empty unit, viz., an index or numéraire which is to be placed alongside price, or alongside value; both turned into indexes.

How does von Bortkiewicz sustains these variegated sets of indexes? Very simply. By means of assertion:

"This much is needed to be said in order to avoid misunderstandings due to the multiple significance of the concept of value."  
(1952, p. 6)

Before we enter into the conversion of values into prices

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- 1 von Bortkiewicz, 1952, p. 5.
  - 2 von Bortkiewicz, 1952, p. 10.
  - 3 von Bortkiewicz, 1952, p. 6; emphasis added.
  - 4 von Bortkiewicz, 1952, p. 5; emphasis added.

replaced by indexes, where von Bortkiewicz can display and make useful selection of his triple assortment of values already produced, we will consider next his theory of Value- and Price-calculation.

## P A R T II

### VALUE-CALCULATION AND PRICE-CALCULATION:

#### THE ART OF DOUBLE ACCOUNTING

After von Bortkiewicz has exposed an assortment of value on the basis of his original duality, i.e. value as an "absolute" and as an "index," he proceeds to elaborate separately on value and on price, each as an "index." In doing so, he enunciates one distinct system of calculation for each, governed by its own distinctive "Law":

"Value-calculation means to determine the exchange-relationships of goods according to the Law of Value. Price-calculation means to determine the same exchange-relationships according to the Law of the Equal Rate of Profit 7/.

7 Marx himself talks occasionally of a 'capitalistic method of calculation, which is prima facie fatuous and which appears to contradict the laws of the formation of value'. Das Kapital, I, p. 395, footnote 110." (von Bortkiewicz, 1952, p. 6)

Therefore, from value having been a set of indexes self-identical to prices, von Bortkiewicz produces two distinct systems of calculation, viz.,

- i) a system (or principle) of Value-calculation;
- ii) a system (or principle) of Price-calculation.

So from now on, each collection of "goods" is to be presented in a dual system, each with its exclusive Law.

We have seen how the repeated attempts of von Bortkiewicz to explain to us what it is that determines the value of commodities, inexorably regresses to his primeval tautology.

In respect of the new "Law," i.e. "Law of the Equal Rate of Profit", we are being told here that it is the same indexes of exchange relationships. But as to what is the difference -if any-, no information is provided. Instead, von Bortkiewicz refers us to a footnote on Capital, i.e. "Das Kapital, I, p. 395, footnote 110.", which might as well provide some clarification, as we quote it in full:



"The reader who is imbued with capitalist notions will naturally miss here the 'interest' that the machine, in proportion to its capital value, adds to the product. It is, however, easily seen that since a machine no more creates new value than any other part of constant capital, it cannot add any value under the name of 'interest.' It is also evident that here, where we are treating of the production of surplus value, we cannot assume a priori the existence of any part of that value under the name of interest. The capitalist mode of calculating, which appears prima facie, absurd, and repugnant to the laws of the creation of value, will be explained in the third book of this work." 1/

Von Bortkiewicz reinforces the apparent absurdity of the capitalist form of calculation by postulating the "Equal Rate of Profit" as the "Law". In other words, by clinging to appearances and turning them into a law. In consequence, he takes for granted how and on what basis profits are, precisely, equalized so as to yield proportional profits. Von Bortkiewicz is assuming a part of the surplus value under the name of "Rate of Profit", 2/ unexplained -so far- and secluded in a system of calculation.

But let us note that von Bortkiewicz is also making clear that

"In what follows, value will always be taken to mean the index of an exchange-relationship, unless the contrary is explicitly stated. It is of the essence of that concept of value that its magnitude be determined according to the (Marxian) Law of Value.

This in fact constitutes the difference between value and the price of production 4/ (for which we shall briefly say 'price'), since the latter is formed not according to the Law of Value, but according to the Law of the Equal Rate of Profit. Price is also, however, like value, the index (or exponent 5/) of an exchange-relationship, and, again, just like value, represents a purely theoretical structure, although price, i.e. the price of production, which is essentially the same as the 'natural price' of the classical economists, represents a higher degree of approximation to reality than does value 6/.

4 The distinction made by Marx between 'price of production' and

1 Marx, 1918, p. 425. Marx is neither speaking here of any Law of the Equal Rate of Profit nor of profit. On the contrary, while he is speaking of the production of surplus value, he observes that we cannot assume a priori an "interest." That although not only the capitalist does that, this cannot be simply taken for granted, neither by itself, i.e., as the "interest" that the machine adds to the product, nor as surplus value. That while at first sight it appears absurd and repugnant, it will be explained in Vol. III on the basis of the laws of the creation of value, the creation of value which is regulated according to Marx, by the quantity of labour necessarily required under average conditions of skill and intensity of labour prevailing in society to produce any good.

2 Likewise, and on the same justifications, he could have spoken of "Rate of Interest," or "Rate of Ground Rent."

'real price of production' (Das Kapital, III, p. 274) need not be considered here. This distinction is connected with the peculiar part assigned by Marx to commercial (in contrast to industrial) capital. This is discussed further on.

5 Das Kapital, I, p. 72. Cf. Das Kapital, III, p. 339.

6 Cf. Das Kapital, III, pp. 1-2." (von Bortkiewicz, 1952, p. 6)

Let us deal in order with the information supplied here.

He is warning the reader, that the iconography he is about to construe for value -an "index," and for price -an "index," is not just ambiguous, i.e. abiding by two Laws, but also purely theoretical. In other words, that it is not built upon facts, and therefore, cannot in its turn, be applied to facts. And further, that this is not the case for price of production, which in spite of his calling it "price" also, nevertheless "represents a higher degree of approximation to reality than does value" -an "index"; or than does price,<sup>3/</sup> -also an "index".<sup>4/</sup> A new confusion is being lodged.

Now, each Law is to constitute a system of indexes, each sustained by its sole, exclusive principle.<sup>5/</sup>

In support of his exposition, and as a further elucidation for what he briefly and ambiguously calls price (whether it is price -an "index", or price of production, he is determined to make a quid pro quo), he refers us to Marx in several footnotes, which in turn refer us to Capital.

In order to confront unsupplied illustration, let us quote "5/ Das Kapital, I, p. 72.", which for him seemed to be a surety for speaking of value as "the index (or exponent 5/) of an exchange-relationship,". As he is interpreting Marx, let us take this

3 "It [price of production] is an abstract price, and, as such, a pure concept, produced by thought, in the same way as value for the purpose of understanding reality. The phenomenon is not price of production but concrete price, market price." (Emmanuel, 1972, p. 388)

4 "According to Marxist theory the axis of gravitation is either -depending on circumstances: an important qualification- the ratio between the quantities of the factors, which is called labor value, or the ratio between the rewards of these factors, which is called price of production." (Emmanuel, 1972, p. 388)

5 We can realize from the above citation, that also "It is of the essence of that [other] concept of value ["(for which we shall briefly say 'price')"] that its magnitude [or speaking properly, that itself as a mere index that it is, ] be determined [not] according to the Marxian Law of Value [sic]", but according to the Law of the Equal Rate of Profit. As for the presumable "essence of that concept", moreover in double entry, and the empty indexes that it yields, we have already seen above, the unpleasant results at which Walras -his companion knight errant in these jousts, ended up. This does not deter him from advancing it as a dual "Law(s)" to which he binds himself.

opportunity and bring the full text of this reference,<sup>6/</sup> which von Bortkiewicz sees fit to refer only by page, en passant, in a footnote.

"The price is the money-name of the labour materialised in the commodity. The equivalent of the commodity and the sum of money the name of which is its price is therefore tautology(p), as the relative expression of value of a commodity is always the expression of the equality of two commodities. But though the price, as the expression of the extent of value of a commodity, is the expression of its exchange-relation with money, it does not follow that the converse is true, viz., that the expression of the exchange-relation of a commodity with money is necessarily the expression of its extent of value. Socially necessary labour of equal quantity is represented in a quarter of wheat and in £2 sterling (usually half an-ounce of gold). The £2 sterling is the money-expression of the extent of value of the quarter of wheat, that is, its price. If now it happens that the quarter of wheat be estimated at £3 sterling, or at £1 sterling, £1 is too little, and £3 too much, as an expression of the extent of value of the wheat, but they are still its price, for, firstly, they are its value-form, money, and, secondly, they are the expressions of its exchange-relation with money. Under constant conditions of production, or constant productive-power of labour, an equal quantity of social labour-time must be expended to produce the quarter of wheat both before and after the rise or fall in its price. This circumstance does not depend upon the will of the wheat-producer, or of other commodity-producers. The extent of value of the commodity thus expresses a necessary relation, closely connected with its production, between the article and the social labour-time necessary to produce it. As soon as the extent of value is transformed into a price, this necessary relation appears as a relation of exchange between the commodity itself and the money-commodity which exists external to it. In this relation, the extent of value of the commodity can be quite as well expressed as the greater or less value at which, under given circumstances, it is alienable. The possibility of a quantitative incongruity between the price and the extent of value, or the deviation of the price from the extent of value, thus consists in the price-form itself. This ambiguity, instead of being a fault in the price-form, is, on the contrary, one of the advantages of that form, because it adapts it to a mode of production in which the rule only becomes a law by the blind operation of irregularities which, as a whole compensate and mutually destroy each other.

The price-form only admits the possibility of a quantitative divergence between the extent of value and the price, that is to say, between the extent of value and its proper money expression; but still it may conceal an absolute contradiction in such a way

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6 This is most appropriate, as the reader can decide, for example, on his own and not, uncritically, on behalf of third parties:

"Marx states dogmatically that commodities tend to exchange at prices which correspond to their values (so that the ratio of the prices of any group of commodities is the same as the ratio of their values)."  
(Robinson, 1974, p. 14). This is also important because it allows us to argue on Marx's own terms and not on what von Bortkiewicz might, or might not have seen there was in, or not, in Marx's "mind".



that the price altogether ceases to express the value, although money is only the value-form of a commodity. Things which are not of themselves commodities, as, for example, honour, conscience, etc., may become venal, and thus acquire, by the price paid for them, the commodity-form. A thing may thus formally have a price, without having a value. The price here becomes an imaginary expression, like certain quantities in mathematics. On the other hand, the imaginary price-form, as, for example, the price of uncultivated land, which has no value because no human labour is realised in it, may conceal relations of real though indirect value.

(p) 'Ou bien, il faut consentir à dire qu'une valeur d'un million en argent vaut plus qu'une valeur égale en marchandises' (Le Trosne, l.c., p. 922), or in other words, 'qu'une valeur vaut plus qu'une valeur égale,' (that a value is worth more than an equal value -Ed.)". (Marx, 1908, pp. 65, 66)

For von Bortkiewicz and in contradistinction with Marx, there is, so far, no possible quantitative incongruity between the extent of value and its expression in money, vulgo price. He denies the fact that commodities are exchanged as products of social labour, while they have been produced by private and independent producers, which, in fact, compels their custodians to find an equation in the marketplace -or eventually face the penalty of finding no equation and hence not being able to get rid of, say, a quarter of wheat.

In the wishful presuppositions of von Bortkiewicz, which gratify us with inexorable "fine weather", there are always means in which his system ought to yield proportionality. For no other reason than that he has assumed it. That is to say, that price itself is made self-same to value.

As if Marx had former and future erudites in mind, he reminds all of us, that the expression, i.e. the exponent of an exchange-relationship can only exist between at least two commodities. Von Bortkiewicz, on the contrary, discovers that a commodity has labour-time by itself, proportional to value, so he can at least find three tautologies between two commodities.<sup>7/</sup>

Moreover, he sees no reason to distinguish the fact that personal attributes, such as "conscience, honour," can be sold and stamped with a price without having value; as he generalises it to the universe of "goods," whereby each consumer can build assortments

7 Or perhaps not only a multiple tautology, but also some swarming inequality, as "indeed it must be admitted that a million in money has more value than the same value in commodities", i.e. in wage-labour "as such a measure of value", in spite of Le Trosne's belittled predecessors, or "quelquefois," their egregious successors.

of value, duly regulated by two Laws, each operating on one set of goods from which a frantic abundance of mere indexes intermitently arises.

Ingenious as he is, von Bortkiewicz profers the pious wish that commodities do not count as average examples of their class. On the contrary, he claims a proportional relation between the secluded labour time he has found in a commodity alone, and what he regards is its price, or its value. This option depends on the Law by which he happens to abide.

As a result, he has abolished competition, and further, the need for any particular commodity to find an equation with the money form, i.e. its price. He is assuming that all commodities are directly exchangeable. This, he achieves by abolishing money, as he turns every commodity into a special equivalent of itself. After this reflection is made, it is not difficult for him to extend his proportionality further, to the totality of "goods".

In contradistinction to von Bortkiewicz's doctrine, price is the monetary language for the labour time which the particular commodity as an average sample of its class embodies, expressed exclusively in the general equivalent, viz., money. Hence, every commodity expresses and exposes its extent of value in the price form. This expression takes shape of an equality and not of a tautology, so that the commodity realizes its extent of value only in the very act of exchange. But even allowing for an unchanged productivity of labour, along with the rest of the conditions of production remaining equal (including skill and intensity of work unchanged), it is possible that due to the state of the market, the commodity would sell at a price which can deviate from the extent of its value. In other words, the price could allow the commodity to be sold over its value, or not even reach it, in its equation with money. In the case of the quarter of wheat, in particular, its value would count as a component part of the sum of total labour contained in the bulk of wheat as a whole. Precisely because the quantity of wheat that the market can absorb fluctuates continually, likewise its expression in its price form to which it relates, varies. Further, such name in money expresses equally well the amount of social labour for which such wheat can be alienated under determinate circumstances at the market. That is to say, the portion or fraction of social

labour that in the form of money the seller of wheat can part with.

So far, it is of no avail to refer the reader to Marx in support of von Bortkiewicz's exposition <sup>8/</sup>.

Let us return to von Bortkiewicz again after this lengthy digression. While he poses the presumed benefits to be drawn from the enterprise he is about to embark upon, he intimates a compelling piece of advice in the insights he will lay out for us.

"Although Marx's attempt to recalculate values into prices must be regarded as a failure, yet the idea of such double calculation should not be dismissed off-hand. A correct solution of the theoretical problem which Marx had set himself, is very apt to strengthen an insight into important economic relationships. To reach a solution, it is advisable to reduce to wage outlays all of the outlays of all capitalists who took part in the production of a commodity. We shall present algebraically, from this point of view, first values and then prices." (von Bortkiewicz, 1952, p. 13)

Let us follow von Bortkiewicz and see how he proceeds, as we make clear that our only intention is to improve our understanding of the economic relationships, particularly by means of algebraic exposition, as we turn without any further delay first to Value-calculation followed by Price-calculation. That is to say, "first values and then prices", respectively.

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8 It should be understood that it is difficult to transcribe all of von Bortkiewicz's reference in passing, while he avoids -so far- any direct quotation from Marx. Be it illustrative enough with the examples we occasionally select.



## CHAPTER V

### VALUE-CALCULATION

The algebraic presentation of the value of commodities is initiated as follows:

"Let  $w$  be the value of a quantity  $\int$  quantitative unit (Mengeneinheit) of any commodity, and  $A$  the number of units of labour, e.g. labour-days, embodied in it. Let  $\ell$  be the wages, e.g. per working day, and  $r$  -as formerly- the rate of surplus-value, then it follows that:

$$(7) \quad w = A\ell + rA\ell \quad "$$

(von Bortkiewicz, 1952, p. 13)

For a start, this is an expression manqué, in so far as there are  $n(n)$  values, at least, for any of the commodities he is referring to, i.e. according to his special assumptions. How has he disposed of the  $n(n)-1$  numéraire values;  $n(n)-1$  units of labour time as such based on "wage outlays"? In other words, how has he managed to obliterate  $n(n)-1$  of his values and only pose one? Von Bortkiewicz does not provide any clarification of this departure, although he is not abiding by his implicit assumptions.

But even after this unexplained holocaust, whereby out of  $n(n)$  expressions for each of his commodities just one remains as depicted above by him, "equation" (7) has not a solution proper. Even taken by itself, it has more "unknowns"  $(r, \ell)^{1/}$  aside of  $w$ ,<sup>2/</sup> than solutions could provide. It follows that  $w$ , and hence  $\ell$  and  $r$ , could have, likewise,  $n(n)$  values -at least. Furthermore, they cannot constitute unknowns, as an unknown is a magnitude and not merely an index.

Curiously enough, we do not know if  $A$  is an unknown or a

<sup>1</sup> He informs us that:

"Whoever attempts to solve this theoretical problem, is not entitled to treat the rate of surplus value and wages as given quantities. They must, on the contrary, be regarded as unknowns." (1952, p. 14) Unfortunately, von Bortkiewicz does not seem to know the difference between a parameter and an unknown. Moreover, he takes one for the other.

<sup>2</sup> That is to say, it is as "overidentified" as it is undifferentiable, i.e. undetermined.

parameter, since he refrains from uttering a word about it. He refuses to provide any explanation whatsoever.

Finally, von Bortkiewicz exposes his blurred distinction between an equation and an identity, since in (7) there is more than one unknown posed while just one expression is provided.

#### I. Non-existence of constant capital

At first, von Bortkiewicz confesses a peculiar constraint in referring to (7):

"The correctness of this formula is obvious so long as it is assumed that the production of the commodity concerned does not cause the capitalist to incur any outlays other than wage-payments, or, in other words, that only variable capital is engaged in this production." (1952, p. 13)

Von Bortkiewicz has the wild idea that wage labour can be set down to work confronting no means of labour whatsoever, i.e. no constant capital.<sup>3/</sup> He thinks that one fine morning, wage labour would hire itself -he has not told us how, to whom or by whom- and would set down to work not even with object and instruments of labour -let alone materialized in the form of constant capital-, just in order to validate (7). Simultaneously, without any process of labour taking place, a levy is raised which he calls "rate of surplus value" <sup>4/</sup>.

However, von Bortkiewicz attempts next to introduce constant capital:

"It can, however, easily be shown that formula (7) does not lose its validity through the addition of constant capital.

Should this constant capital, namely, be itself created without the aid of another constant capital, then its value could, without any further ado, be expressed by a formula of exactly the same structure as formula (7). A would then indicate how many working days are embodied in the constant capital concerned. Constant capital enters into the value of the product to the extent of the whole or of part of its own value. Formula (7) will consequently still be valid for the value of the product, with A representing the whole amount of labour employed in the production of the commodity concerned, both directly and indirectly (i.e. through the intermediary of the constant capital)."

(von Bortkiewicz, 1952, pp. 3, 4)

First of all, von Bortkiewicz should have explained to us,

<sup>3</sup> "We assume in the following... (c) that there are no primary factors of production other than labour;" (Morishima, 1973, p. 12)

<sup>4</sup> He does not state whether such levy is raised "sword in hand" à la Dühring, or if it was "surplus left by labour", à la Proudhon.

how that part of the value of a commodity product, in which the means of production used up express themselves in their value form, i.e. constant capital, could have been created without the aid of constant capital itself. Even on the basis of plain common sense, it is difficult to understand how object and means -or instruments- of labour, exclusively represented by constant capital whose form they take, could be created, actually, without the very object and means -or instruments- of labour in which constant capital is substantivized, within von Bortkiewicz's model.

Faced with this puzzling spontaneous generation, (7), which by itself could avowedly not depict constant capital (or its use), can suddenly depict it by expression (7) itself twice, linked up by addition, according to von Bortkiewicz. Hence

$$(7)'\quad w = (A\ell + rA\ell)_{\Pi} + (A\ell + rA\ell) \quad 5/$$

where  $\Pi$  represents the amount of labour "indirectly" employed in the production of the commodity value  $w$ , i.e. through the "intermediary" of constant capital; as an outcome, originally, of

$$(7)\quad w = A\ell + rA\ell$$

We would only note again, his peculiar procedure of adding a constant capital which should have not existed before, but which suddenly appear before us.

For von Bortkiewicz it is not that constant capital reappears because it was advanced earlier. On the contrary, as it was neither advanced nor used up, it is to undergo an "addition" -according to him. This looks like a contradiction in terms.<sup>6/</sup> Nevertheless, he concludes that formula (7) -or more precisely (7)'-, will "consequently" still be valid in expressing the value of the commodity product representing the amount of labour "indirectly" -noted by us as  $\Pi$ - through the "intermediary" of constant capital, adjoined by

5 Formulae with an affix indicate that they are implicit in von Bortkiewicz, while they are being written explicitly by us for the convenience of exposition.

6 We have just observed "his peculiar procedure of adding a constant capital which should not have existed before," in the last paragraph.



the amount of labour employed "directly".

But there is a further eventuality to which von Bortkiewicz refers next:

"Should, however, another constant capital have participated in the production of the constant capital concerned, then the analysis of value of the product would have to be carried further to the point where a constant capital is found which is wholly the result of the exclusive product (ausschließliches Produkt) of direct labour. The general validity of formula (7) would then become apparent." (von Bortkiewicz, 1952, p. 14)

He is referring, namely, only to the constant capital used up produced in earlier periods of production for the commodity product concerned <sup>7/</sup>. In such case, the "analysis of the value of the product would have to be carried further [should read: taken backwards] to the point where a [used up] constant capital is found which is wholly the exclusive product of direct labour", so as to make the general validity of (7) apparent.

Therefore, by retracing the origin of constant capital used up to the corresponding earlier period, (7)' would take the following form:

$$(7)'' \quad w = \sum_{s=1}^T \left[ (A\ell + rA\ell)_{II} \right]_{t-s} + (A\ell + rA\ell)$$

where T would refer to the total periods by which the analysis is to be taken back to the corresponding earlier period, and t would refer to the current period.<sup>8/</sup>

Once such hypothetical regression is arrived at, von Bortkiewicz discovers, at the end, that he has actually reached

7 Von Bortkiewicz did not leave any instructions as to how the advanced constant capital which is not used up in the production of w, is to be represented.

8 "The labour time 'socially necessary' for the production of a unit of each commodity is found by reducing each industry [sic] into its own direct labour requirements and indirect necessary labour requirements per unit of output, entering as means of production in the form of a 'dated' labour sequence." (Blundell-Wignall, 1976, p. 279) "Moreover, if we consider the production of a commodity from the point of view of the whole society, it becomes apparent that the commodity's exchange-value represents the total amount of abstract labour time socially necessary...for its production, both directly (in the process of producing the commodity from its material inputs) and indirectly (in the process of producing the material inputs themselves, and the inputs of the inputs, and so on)." (Shaikh, 1977, p. 113)

"the point where a used up constant capital is found which is wholly the exclusive product of direct labour." <sup>9/</sup> That is to say, a situation which can be exclusively represented by (7), as he is explicitly disposing of "indirect labour," otherwise II.

Therefore, it is not only that von Bortkiewicz has lost direction, as he claims to move forward, when he is actually going backwards in order to simply express the value of a commodity. He speaks of "indirect labour" in the pretence of expressing constant capital, only to find, at the end, that he has arrived at his point of departure. That is to say, to "direct labour", from where he departs and to where he arrives as he depicts a circularity leading nowhere. Meanwhile, he abstains from expressing the value of constant capital, either on its own, or as part of the commodity values he handles.<sup>10/</sup>

As if von Bortkiewicz had the premonition of his retractions in advancing constant capital, he concludes arguing for an apparent general validity of formula (7). To be precise, we would add: not only apparent, but deceiving. Constant capital on its own or as a component of commodity values is not set forth by him, as before remarked.

Availing himself of appearances, and after having disregarded "indirect labour" (in the guise of referring to used up

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9 Emphasis added.

10 This elusive pursuit is retold as it is endorsed as follows:

"He von Bortkiewicz defended his assumption of observability of labour-embodied values with the mathematically sophisticated argument that the total labour embodied in the commodities could always be calculated by summing finite series representing indirect labour requirements. This is only so, he recognized explicitly, for the assumption that all units of constant capital (both circulating /sic/ and fixed) are ultimately produced by unassisted labour (von Bortkiewicz, 1907, pp. 13-14, 18)." (Bose, 1975, p. 96)

It should be observed that all von Bortkiewicz says in his Value-calculation, is that in so far as "indirect labour" is to be "direct labour," then "indirect labour requirements" need never be calculated. Bose observes, however, that they could always be calculated, and sees in this contraption, a "mathematically sophisticated argument". Von Bortkiewicz's simpleness undergoes a sufflation in the above statement. Further, Bose takes "indirect labour" for constant capital, emulating von Bortkiewicz's displayed confusion. He also overlooks von Bortkiewicz's disregard for all the units of "unassisted labour" which are ultimately not consumed productively by commodity values. It is worth noting that Bose is most concerned about "observability", erroneously imputing this concern and its defence to von Bortkiewicz, when von Bortkiewicz is explicitly attempting to provide a rigorous algebraic interpretation of Marx himself.

constant capital), he methodically proceeds to further elaborate his argument from (7) itself, asserting next that

"Equation (7) brings to light the manner in which the value of the product is composed of wages ( $A\ell$ ) and of the capitalist's profit [gain (Gewinn)] or surplus value ( $rA\ell$ ). The same equation, written in the form

$$(8) \quad w = (I+r)\ell A$$

indicates that the value ( $w$ ) is proportional to the amount of labour used ( $A$ ).  $(I+r)\ell$  is the same for all products or goods and appears for that very reason, as a factor of proportionality." (von Bortkiewicz, 1952, p. 14) 11/

Further, if we

"Let  $n$  be the number of all goods bought and sold in the market... On the basis of formula (8) one can set up the set of equations

$$(9) \quad \left\{ \begin{array}{l} w_1 = (I+r)\ell A_1 \\ w_2 = (I+r)\ell A_2 \\ \cdot \quad \cdot \quad \cdot \quad \cdot \quad \cdot \\ \cdot \quad \cdot \quad \cdot \quad \cdot \quad \cdot \\ w_n = (I+r)\ell A_n \end{array} \right. \quad " \underline{12/}$$

Besides, (9) can be rewritten as

$$(9)'; \quad \sum_{i=1}^n w_i = \sum_{i=1}^n (I+r)\ell A_i$$

On the other hand, von Bortkiewicz pleads also to

"let  $c$  be the value of the constant capital,  $v$  the variable capital,  $m$  that of surplus value produced,  $\alpha$  the fraction of constant capital entering into the value of the product, and  $W$  the value of the (yearly) output. On these assumptions:

$$(I) \quad W = \alpha c + v + m \quad " \underline{13/}$$

Let us see how far we can be carried by making use of von Bortkiewicz's formulae.

It follows that (9)' can be identified with (I), once it has been specified as the "value of the (yearly) output." In other

11 In expressing von Bortkiewicz's formulae, we follow his original notation, whereby one is represented as  $I$ .

12 Von Bortkiewicz, 1952, p. 14.

13 1952, p. 6.



words, as

$$\sum_{i=1}^n w_i = W$$

we get

$$\sum_{i=1}^n (I+r)\ell_{A_i} = \alpha c + v + m$$

This identification is a result of von Bortkiewicz's own formulae.

Von Bortkiewicz has claimed, literally, that formula(7) does not loses its validity through the addition of (used up) constant capital by a formula of the same structure as (7), added to the original (7) itself. Likewise for (9)', we get

$$(9)'' \quad \left[ \sum_{i=1}^n (I+r)\ell_{A_i} \right]_{\Pi} + \sum_{i=1}^n (I+r)\ell_{A_i} = \sum_{i=1}^n w_i$$

where  $\Pi$ , as before, represents "indirect labour" -which von Bortkiewicz takes for constant capital used up- within "the value of the (yearly) output."

Furthermore, von Bortkiewicz has told us that in the event of a constant capital having participated in the production of a commodity, in order to express it, the analysis has to retrace its -constant capital used up- origin to the corresponding earlier period. Then, (9)'' would take the following form:

$$(9)''' \quad \sum_{s=1}^T \left[ \sum_{i=1}^n (I+r)\ell_{A_i} \right]_{\Pi_{t-s}} + \sum_{i=1}^n (I+r)\ell_{A_i} = \sum_{i=1}^n w_i$$

where  $T$  is the total number of "(yearly)" periods that the analysis is to be taken back to the corresponding earlier period;  $t$  corresponds to the current period.

In considering von Bortkiewicz's treatment of the value of commodities, whether taken apiece or in their aggregation, it has become manifest that his formulae do not reckon with that part of the

constant capital advanced which participates in the production of the commodities without transferring its whole value to them. Therefore, for any "(yearly) output" under consideration, fixed constant capital could not exist finally, as it would have to circulate in its entirety; as it would have to be totally used up.<sup>14/</sup> The claimed (fixed) constant capital could only have arisen out of earlier periods<sup>15/</sup>. But even then, von Bortkiewicz's back drawing is all the more surprising; if in general all capital was to circulate in earlier periods, then it is difficult to understand how he could have arrived at any specific year with "indirect labour" which in his argument is to supplant constant capital. Or more precisely, used up constant capital, according to his narrow horizon.

With the same aplomb that von Bortkiewicz speaks of "indirect labour", he should have explained to us his implied conundrum, before returning to "direct labour", his starting point.

So far von Bortkiewicz has been unable to express the value of commodities in which "indirect labour" has participated without running backwards to earlier periods and enmeshing himself in the incoherencies entailed: a) if in general all capital turns over in a production period, no "indirect labour" could exist; b) his regression to "direct labour" is irrelevant and misleading, as "direct labour" constitutes in fact, the basis for his progression composing the whole commodity value in the turnover period. In either case, "indirect labour" itself is precluded.

As for the actual means of production (which exist independently of the commodities produced, whether at the beginning or at the end of any "(yearly)" period and whose value form constitutes the constant capital proper) he has nowhere mentioned them. In his argument, he keeps silence about them, as if they were nowhere existent.

After this digression, let us turn to formula (9)''',

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14 "We assume in the following... (d) that all capital goods have the same span of life, which is taken as unity, so that there are no fixed capital goods in the proper sense left over to the next period for further production after having been used in the current period;" (Morishima, 1973, p. 12)

15 We would also observe, in passing, that while for any year in particular all capital is to circulate, von Bortkiewicz does not provide any formula for circulating constant capital which is carried from earlier periods of production.

implicit in him, "representing the whole amount of labour employed in the production of the commodity [viz., commodities] concerned, both directly and indirectly" <sup>16/</sup> for a "(yearly)" period. "Indirect labour" arises out of earlier periods, while "direct labour" is an outcome of the specific period under consideration. However, the commodities  $w_i$  ( $i=1,2\dots n$ ) available for realization in that period are represented by (9)' itself, while the value produced during that year could only amount to

$$\sum_{i=1}^n (I+r)\ell A_i$$

In consequence, the product available for realization

$$\sum_{s=1}^T \left[ \sum_{i=1}^n (I+r)\ell A_i \right] \Pi_{t-s} + \sum_{i=1}^n (I+r)\ell A_i$$

would be larger than the effective requirements for it, which cannot surpass

$$\sum_{i=1}^n (I+r)\ell A_i$$

Therefore, <sup>17/</sup> (9)' would just display that a portion of value of the commodities in the form of "indirect labour" could not be realized.

Von Bortkiewicz should have proved for us that the claimed value referred to as "indirect labour" available in the form of commodities, would correspond to the actual demand of it in that specific year <sup>18/</sup>. But this looks as an impossibility for a rigorous

<sup>16</sup> Von Bortkiewicz, 1952, p. 14.

<sup>17</sup> It looks as if von Bortkiewicz has forgotten his vaunted proportionality, whereby the demanded "direct labour" in the form of commodities ought to correspond to the supply of "direct labour".

<sup>18</sup> If von Bortkiewicz could have realized it in earlier years, as (9)' might suggest, why did he not realize it then? Why "wait" until the current year when it could not be realized? Von Bortkiewicz's waiting transpires as an incoherent postponement of foregone opportunities.



logician of the stature of von Bortkiewicz, as there cannot be any demand for "indirect labour" itself, independent of "direct labour" as such. We have already observed explicitly that von Bortkiewicz supplants constant capital by "indirect labour." This replacement not only renders impossible the realization of "indirect labour", but it exposes that in his frame of analysis, constant capital proper, substantialized in the means of production, is precluded.

Let us finally consider his implicit formula (9)<sup>1</sup>, which for von Bortkiewicz is obviously correct "so long as it is assumed that the production of the commodity [viz., commodities] concerned does [viz., do] not cause the capitalist to incur any outlays other than wage-payments"<sup>19/</sup> -during a specific "(yearly)" period.<sup>20/</sup> In it, the value of the commodities available would correspond to the "direct labour" employed in them.<sup>21/</sup> In turn, it is to be realized by the requirements of such "direct labour" which resolves itself in wage outlays and "surplus value", moreover proportionally. Therefore, all the commodities would form a consumption fund. In consequence, there would be no production fund, integrated by the means of production in which constant capital is materialized. It follows that constant capital could not have entered into the value of the product, neither to the extent of the whole nor of a part of its

19 Von Bortkiewicz, 1952, p. 13.

20 This case is indeed relevant for us, as it is on the basis of this formula that von Bortkiewicz proceeds in his analysis, disregarding explicitly his earlier adumbrations on "indirect labour", as noted earlier.

21 "The total social product is usually defined to include only the commodities newly produced in the given period of time. However, the existence of durable commodities implies that in any given period, 'used' commodities and inventories of unsold products may enter exchange as commodities even though they have not been produced in that period. In the treatment of fixed constant capital, for instance, this issue becomes important. Marx himself suggests in the treatment of fixed constant capital that the portion which is not used up in the process of production should be counted as part of the annual product (Capital, Vol. I, Ch. IX, p. 213). Properly speaking this treatment of fixed constant capital requires Marx's theory of rent [!], and for that reason [?] is not developed in this particular paper." (Shaikh, 1977, p. 38 n. 17)

We overlook that for any individual capital, should the sum of value advanced which remains in the machinery in so far as it has not been transferred to the product to be taken into account, "it will thus enter into the calculation of both sides of the account" (Marx, 1908, p. 172; emphasis added), to actually cite Marx where Shaikh gives a reference in passing. What Shaikh means, is that he will ignore fixed constant capital in his paper, conforming with the usual super-annuated procedure as depicted, say, in any Blue Book.

value.

In (9)<sup>1</sup> we simply confirm the absurdity of expressing the value of the commodity product as a sum of wage outlays and a proportional "surplus value", which ostensibly denies the existence of constant capital.

## 2. Value is the measure of value

Let us further consider in some detail the axioms with which von Bortkiewicz dilates his doctrine, providing beforehand new far-fetched results.

He takes the enterprise of solving a set of "equations" (9), but encounters that

"If this is to be soluble, then the set must be completed by two further equations, as otherwise the number of unknowns ( $w_1, w_2, w_3, \dots, w_n, r$ , and  $\ell$ ) would surpass the number of equations by 2."

(von Bortkiewicz, 1952, p. 14)

Here, we simply confirm that he ignores the difference between an equation and an identity. In his systematic ambiguity, he decides that everything can be a single tautological identity. Since it would appear that his set is incorrectly posed, he would have to draw explicitly, two tautological identities in the pretence of solving it. To "introduce" two further identities, which he takes for equations, would be to confirm its "overidentification" <sup>22/</sup>. It seems as if von Bortkiewicz had merely invented a problem that has no solution, in order to expose his insights in algebra, moreover, very aptly. He finishes up in an embarrassment of axioms, finding himself at pains to get rid of two of them in order to present his tautological identities as a mathematically represented problem.

But von Bortkiewicz is not discouraged by these minor hindrances, and he sets himself to unveil two further identities.

"One of these missing equations can be discovered by considering that amongst the  $n$  goods, there is also that which serves as a measure of value, or as money. Let  $\gamma$  be the ordinal number of this good. Then

$$(10) \quad w_\gamma = I$$

(von Bortkiewicz, 1952, p. 14)

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<sup>22</sup> This is symptomatic in von Bortkiewicz, not just as a statistician, but also as an economist, the sporting of "overdetermination". For every one question, he comes to the fore with at least two answers, e.g. value is "values" and "absolute values".

Here, von Bortkiewicz is presupposing the value of a commodity.

"He thus falls into the commonplace error of vulgar economics, who assume the value of one commodity (in this case... $\left[ w_{\gamma} \right]$  in order to determine the values of the rest." 23/

in a proportional fashion.

What is then, which von Bortkiewicz pledges himself to have found? That value is the measure of value. Moreover, that value being the measure of value is the "measure of price" tantamount to money, for him. A redundant finding where the starting point turns out to be the very result, under the pretence of applied algebra.

Curiously enough, in order for set (9) "to be soluble", he confuses it by bringing into account his Price-calculation;<sup>24/</sup> but not really, because the system he is dealing with, for the time being, is exclusively Value-calculation. A fresh homage to ambiguity.

But in so far as for him every commodity is an individual equivalent of itself, and at the same time can be a general equivalent of the rest, he rules out the existence of one and only one commodity to which the rest relate to express their value. In turn, he makes a unique commodity out of every one.<sup>25/</sup> Hence, all commodities would be directly money for our erudite free-trader, as proportionality rules "for any measure of value" or "prices" in any one commodity. According to his assumptions, for  $n$  "goods" there are, as we have repeated before,  $n(n)$  values which are identical to  $n(n)$  prices.

Therefore, (10) is not a discovery arising from any good in particular. But specially implicit in each and every "good".<sup>26/</sup> In his ineluctable proportionality, instead of having  $n(n)$  "unknowns,"

23 Marx, 1918, p. 92 n.

24 This is in so far as he has spoken of money.

25 So as to make the most of this arbitrary isolation,

"We assume in the following... (b) that each industry produces one kind of output, without any by-product, so that there are no 'joint production problems';" (Morishima, 1973, p. 12)

26 Let us remember that for von Bortkiewicz "value is merely the index of an exchange relationship" (1952, p. 5). Therefore, for  $n$  commodities there would be  $n(n)$  values. Further, that

"Whilst, however, 'value' itself...and 'absolute value' mean two quite different things, a firm quantitative relationship nevertheless prevails between them" (1952, p. 5)

Hence, for  $n$  commodities there would be  $n$  "absolute values". Such a "firm quantitative relationship" implies that the value of each commodity reflects its own "absolute value", which is further confirmed as follows:

"The value of a good A could then be expressed as a certain number of time units of labour, e.g. as 12 days of labour."  
(1952, p. 5)



he is left now with only  $n(n-1)$  "unknowns." <sup>27/</sup> In the guise of referring to a measure of value in (I0), he is advancing instead, a mere standard which regards exclusively the simple appearance of value, devoid of any substance. <sup>28/</sup>

Finally, let us remark again that for vulgar economics every commodity is its measure of value, tantamount to price. What our objector has accomplished in (I0) is merely to make explicit an identity already implicit and disguised as an equation. Besides, (I0) is as superfluous as the rest of his  $n$  "goods" or numerals in determining their putative "value", i.e. numerals in their turn, intrinsically isolated in their hazardous uniqueness.

### 3. The composition of value is resolved into its decomposition

Let us see how von Bortkiewicz unearths and divulges the other "missing equation".

"In order to find the other missing equation, one must start with the real wage, which Marx assumes to be given  $\left[ \frac{29}{7} \right]$ . The

<sup>27</sup> For Walras, for instance, this is the very threshold of the theorem of universal mediocrity, as we have seen earlier:

"145. The theorem of general equilibrium in the market may be stated in the following terms:

When the market is in a state of general equilibrium, the  $m(m-1)$  prices which govern the exchange between all possible pairs drawn from  $m$  commodities are implicitly determined by the  $m-1$  prices which govern the exchange between any  $m-1$  of these commodities and the  $m$ th.

Thus the situation of a market in a state of general equilibrium can be completely defined by relating the values of all the commodities to the value of any particular one of them. That particular commodity is called the numéraire  $\left[ \text{or standard commodity} \right]$ ; and a unit quantity of this commodity is called a standard  $\left[ \text{'étalon'} \right]$ ."

(Walras, 1954, p. 185; rectangular parentheses in the original)

Thus the "conjuncture" of a market in a state of "general equilibrium" can be completely defined by relating the values of all commodities to the value of any one of them. That such commodity is a numéraire and the "numéraire" -or "standard" commodity; and a "unit" quantity and the "unit" quantity of this commodity is called a standard and the standard, following Walras' parlance, as its "overdetermination" is ratified. Hence, von Bortkiewicz's "discovery" of "equation" (I0) by following and borrowing from his vaunted lux perpetua.

<sup>28</sup> "In English works the confusion between 'measure of value' and 'standard of value' is inexplicable. The functions, and consequently their names, are constantly misplaced." (Marx, 1908, p. 62 n.)

<sup>29</sup> He contradicts himself, as earlier on he claimed that:

"Whoever attempts to solve this theoretical problem  $\left[ \text{of the determination of value as conceived by Marx} \right]$ , is not entitled to treat the rate of surplus value and wages as given quantities. They must, on the contrary, be regarded as unknowns." (1952, p. 14)  
Now, he is trying to find what he deliberately lost, hiding himself in Marx, to whom the "real wage" is artificially imputed.

real wage is formed by certain quantities of some of the  $n$  goods. One can, however, equally well say that the real wage is constituted by certain quantities ( $\mu_1, \mu_2, \mu_3 \dots \mu_n$ ) of all the  $n$  goods, where some of these quantities equal zero. The value of this complex of goods known as the real wage, is clearly identical with the money wage. We therefore get:

$$(II) \quad \mu_1 w_1 + \mu_2 w_2 + \dots + \mu_n w_n = \ell$$

We thus reach a system of  $n+2$  equations with just as many unknowns." (1952, p. 15) 30/

Let us observe here, that von Bortkiewicz refers to the money wage for a single labourer. Meanwhile he assumes that the rest of wage labour is identical in both its labour and its wage. 31/

Although on appearance (II) is a definitional identity, it is easy to show that it has been obtruded. If he would have respected an elementary order of exposition, he would have written first:

$$(II)' \quad \mu_1 w_1 + \mu_2 w_2 + \dots + \mu_n w_n = \ell \sum_{i=1}^n A_i$$

proceeding in an ordered manner from (9)' before introducing (IO). In so far as (II)' is deduced implicitly from

$$(9)' \quad \sum_{i=1}^n w_i = \sum_{i=1}^n (I+r) \ell A_i$$

it appears that on the basis of (II)' the complement of "The real

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30 "It is in order to find the proper proportion in which workers should share in the products, or, in other words, to determine the relative value of labour, that M. Proudhon seeks a measure for the relative value of commodities. To find out the measure for the relative value of commodities he can think of nothing better than to give as the equivalent of a certain quantity of labour the sum total of the products it has created, which is as good as supposing that the whole of society consists merely of immediate workers who receive their own produce as wages." (Marx, 1978, pp. 50, 51)

31 "In the second place, he [Proudhon] takes for granted the equivalence of the working days of different workers. In short, he seeks the measure of the relative value of commodities in order to arrive to equal payment for the workers, and he takes the equality of wages as an already established fact, in order to go off on the search of the relative value of commodities. What admirable dialectic!" (Marx, 1978, p. 51)

wage" would be -with respect to the total quantity of "goods"- constituted by certain quantities ( $\nu_1, \nu_2, \nu_3 \dots \nu_n$ ) of all the n "goods", where "some" of these quantities might well equal zero. The value of this complex of "goods" known as the "capitalist's goods" would be clearly identical with

$$(II)'bis \quad \nu_1 w_1 + \nu_2 w_2 + \dots + \nu_n w_n = r \ell \sum_{i=1}^n A_i$$

as he assumes that labour must leave a surplus.

However, (II)'bis <sup>32/</sup> is no less appropriately redundant than (II)' to round up a vicious circle with (9)'.

Let us elaborate. In so far as (7) claims that

value = "real wage" + surplus,

(9)' being its aggregate, (II)' states that the aggregate of wage labour "goods" is identical to the "real wage"; and (II)'bis that "capitalist's goods" is identical to the surplus. Hence,

(II)' wage labour "goods" = "real wage"

(II)'bis capitalist's "goods" = surplus

This conclusion derives from (9)' which is merely a consequence of (7) aggregated, which already implies the following:

(9) value = "real wage" + surplus;

"real wage" = value - surplus, hence (II)';

surplus = value - "real wage", hence (II)'bis.

But this does not abash von Bortkiewicz much. Right on the next page, he has the effrontery to declare that:

"In this connection, Marx speaks of the 'illusion that value arises out of its own components' <sup>24/</sup>, and of the 'fine erroneous circular reasoning' which he believes to be constituted by the fact that the value of a commodity is gained by adding up 'revenues', the very size of these revenues being made to depend on the commodity values <sup>25/</sup>.

The above derivation shows, however, that Marx's alleged contrast does not, in fact, exist. Formula (7), which has been our starting point, is based on this very idea that the value

<sup>32</sup> This expression is advanced here only to expound von Bortkiewicz's argument. Its content -if any- is considered infra.



of a commodity is created by the sum of wages and profit [should read: capital gains (Kapitalgewinn)]<sup>7</sup>. To express first commodity values as functions of wages (in set (9)), and then to express wages as a function of commodity values (in equation (II)), is by no means circular reasoning. For anyone to regard this procedure as an offence against logic, would only reveal his utter ignorance of algebra.

24 Das Kapital, III, p. 382; cf. II, pp. 383-385.

25 ibid., pp. 378, 382, 398. I am here disregarding [ground] rent [Grundrente], which Marx also considers in these passages. Cf. Theorien über den Mehrwert, II, p. 80, where he speaks, not of a 'circular reasoning' but of a 'miserable seesaw'." (von Bortkiewicz, 1952, p. 16)

Contrary to von Bortkiewicz's conclusions, we have seen how, proceeding in order, formula (7) implies value identified with the "real wage" and a proportional surplus.<sup>33</sup> When using his formula to aggregate the "real wage", we saw that it is identified with value minus the surplus; which in turn -the surplus- is identified with the value of the product minus the "real wage". For von Bortkiewicz to proceed logically means to engage in implicit vicious circles. His knowledge of algebra precluded him to operate with any other expression which is not a tautology.

It is interesting to recall that in referring to the commodity product for a specific period of time, von Bortkiewicz has spirited away the value of constant capital, as for him the cost of production is to be exclusively represented by wages and a surplus upon wages,<sup>34</sup> conforming the net product; to be distributed, in turn, in the form of revenue. Ricardo himself refuted this subterfuge, as he observes that

"There can, then, be no net produce, because the cost of production, according to M. Say, consists of rent, wages and profits. In page 508 he says, 'The value of a product, the value of a productive service, the value of the cost of production, are all, then, similar values, whenever things are left to their natural course.' Take a whole from a whole and nothing remains." (Ricardo, 1951a, p. 421 n.)

#### 4. Surplus is a proportional and reciprocal percentage upon wages

Let us turn now to identity (I0), already enunciated. At the very end of his pilgrimage for "solving" Value-calculation, he discovers suddenly a new and prompt procedure to solve the whole set (9), obviating his own exertions as noted above. By solely

<sup>33</sup> We are leaving aside his inherent confusion between Value-calculation and Price-calculation (comprising "capital gains.")

<sup>34</sup> We disregard here, like von Bortkiewicz, ground rent.

introducing (I0), he found that:

"As  $\int (I0) \int w_{\gamma} = (I+r)\ell A_{\gamma} = I$ , these commodity values can also be ascertained in a direct fashion, i.e. without the detour over  $r$  and  $\ell$ , namely on the basis of:

$$(I7) \quad w_1 = \frac{A_1}{A_{\gamma}}, w_2 = \frac{A_2}{A_{\gamma}}, \dots w_n = \frac{A_n}{A_{\gamma}}$$

These equations show that the values of commodities depend exclusively on the amounts of labour required for their production, and that commodity value is consequently unaffected by the level of the wage rate and of the rate of surplus value." (von Bortkiewicz, 1952, p. 16; emphasis added)

Anybody endowed with common sense and elementary knowledge of algebra, would realize that the "equations" referred to as (I7) do not show that the values of commodities depend "exclusively" on the "amounts of labour required for their production," viz., "on the number of units of labour, e.g. labour-days, embodied in it";<sup>35/</sup> that is to say "A".

For von Bortkiewicz's words to correspond with his algebra, whereby the values of commodities depend exclusively on the amounts of labour required for their production, unaffected by  $\ell$  and  $r$ , (9) would take the following form:

$$(9)bis \quad \left\{ \begin{array}{l} w_1 = A_1 \\ w_2 = A_2 \\ \cdot \quad \cdot \quad \cdot \\ w_{\gamma} = A_{\gamma} \\ \cdot \quad \cdot \quad \cdot \\ w_n = A_n \end{array} \right.$$

Now, his words correspond to his deeds; sheer tautologies in a "direct fashion, i.e. without the detour over  $r$  and  $\ell$ ", i.e. supplanting:

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35 Von Bortkiewicz, 1952, p. 13.

$$(9) \quad \begin{cases} w_1 = (I+r)\ell A_1 \\ w_2 = (I+r)\ell A_2 \\ \cdot \quad \cdot \quad \cdot \quad \cdot \quad \cdot \\ [w_\gamma = (I+r)\ell A_\gamma] \\ \cdot \quad \cdot \quad \cdot \quad \cdot \quad \cdot \\ w_n = (I+r)\ell A_n \end{cases}$$

As a result, in (9)bis the value of any commodity is identical with "absolute value", viz., with the quantity of labour employed in its production. At the same time, he has introduced his assortment of value whereby labour time is measured by labour "as such", and not by means of wage labour, i.e. (9). Therefore,  $\ell$ , "the wages, e.g. per working day" and  $r$  "-as formerly- the rate of surplus value," are suddenly no more and suddenly they reappear as the constituent elements of the "good."

Therefore, set (9) has been cast aside, and its place is occupied implicitly by (9)bis. In consequence, (7) is alternatively displaced by

$$(7)\text{bis} \quad w = A$$

Sensible as he is, he informs us that

"In this sense, one can write the formula

1 unit of commodity A = a working days." <sup>36/</sup>

Further,

"Let  $n$  be the number of all goods bought and sold in the market. In algebraic terms, the problem is to determine the values ( $w_1, w_2, w_3, \dots, w_n$ ) of these goods. The given factors are  $A_1, A_2, A_3, \dots, A_n$ , each of which represents the amount of labour embodied in one unit of the product concerned. On the basis of formula (8) should read: (7)bis one can set up the set of equations (9) should read: (9)bis" <sup>37/</sup>

However, there is a minor hitch to the matter. The reader might ask how  $w_\gamma$  is determined. First, von Bortkiewicz claims that his problem is to "determine"  $w_i$  ( $i=1, 2, \dots, n$ ), only to expose that they are "overdetermined" or "overidentified," exposing the tauto-

<sup>36</sup> Von Bortkiewicz, 1952, p. 56.

<sup>37</sup> Von Bortkiewicz, 1952, p. 14.



logical nature of his procedure. In other words, that  $w_\gamma$ , for instance, is already determined. Hence (I0). Wise as he is, he finds the solution before he goes on to search for it.

Von Bortkiewicz never presents (7)' or (9)bis as such. It would expose the redundant foundation of his edifice devoid of determination.

How does he prove that the value of commodities depends on the amount of labour required for the production of each individual one? And that the commodity value is consequently unaffected by the level of wages and of its markup, i.e. the surplus? Precisely, by alternatively using (9)bis in place of (9).

He has the peculiar ability to persist in holding up simultaneously two distinct principles. According to (I7), which conceals (9)bis, which in turn is based on (7)', he concludes that the value of any commodity is unaffected by changes in its components. In other words, that  $\ell$ , wages, is to be reciprocal in its relation to the "rate of surplus value" multiplied by wages. In his own words, "commodity value is consequently unaffected by the level of the wage rate and of the surplus value", as quoted before, on the basis of (I7).

At the same time,

$$(7) \quad w = A\ell + rA\ell$$

exposes how the wages and the "rate of surplus value" multiplied by wages are directly proportional to each other in relation to the value of a commodity. Hence, the higher the wages, the higher would be the markup upon wages, as the value of the commodity seems to be at their mercy, i.e. altering such value as a whole.

Therefore, for von Bortkiewicz, the value of a commodity is affected in so far as its components are directly proportional according to (7). Nevertheless, the values of a commodity are not affected by its components, which are, according to (I7), inversely proportional.

Here, we are witness, once more, of a major achievement in political economy, whereby two mutually exclusive conclusions hold "good" in his principle of Value-calculation. A most singular achievement of double principles, once more.<sup>38/</sup>

<sup>38</sup> It is interesting to point out that (I7) is "shared" by Walras, who after fabricating the "standard" commodity on the basis of a

## 5. The fading of a surplus rate

In addition to his assortment of values, we have seen above that for von Bortkiewicz constant capital does not and cannot exist; that his explanation of value is merely circular, and that he manages to hold that wage labour and a surplus stand not only in a direct proportional relation to each other, but at the same time in a reciprocal one. This latter reciprocity is derived from

$$(17) \quad w_1 = \frac{A_1}{A_\gamma}, \quad w_2 = \frac{A_2}{A_\gamma}, \quad \cdot \quad \cdot \quad \cdot \quad \cdot \quad w_n = \frac{A_n}{A_\gamma}$$

which implies, implicit in (9)bis,

$$(7)' \quad w = A$$

Therefore, the "rate of surplus value" and wages are merely fabricated upon implicit (7)', as

$$(7) \quad w = A\ell + rA\ell$$

The indeterminability of such markup, i.e. the "rate of surplus value", is exposed as follows. From

$$(9)' \quad \sum_{i=1}^n w_i = \sum_{i=1}^n (1+r)\ell A_i$$

numéraire, shuttles his  $m$  prices out of the  $m$  prices in a dull circle:  
"If now, we suppose the values of (A), (B), (C), (D) . . . all to be related to the value of (A), we obtain the following series of prices:

$$p_{a,a} = 1, \quad p_{b,a} = \mu, \quad p_{c,a} = \pi, \quad p_{d,a} = \varrho.$$

If, instead of relating these values to the values of (A), we were to relate them to the value of (B), we should have the following series of prices:

$$p_{a,b} = 1/\mu, \quad p_{b,b} = \mu/\mu, \quad p_{c,b} = \pi/\mu, \quad p_{d,b} = \varrho/\mu.$$

Thus: To shift from one numéraire to another, it is only necessary to divide the prices expressed in terms of the old numéraire by the price of the new numéraire in terms of the old."

(Walras, 1954, pp. 185, 186)

Anew, the generative power of both mutually replaceable pair of demiurges, is cast.

$$r \ell \sum_{i=1}^n A_i = \sum_{i=1}^n w_i - \ell \sum_{i=1}^n A_i$$

$$\frac{r \ell \sum_{i=1}^n A_i}{\ell \sum_{i=1}^n A_i} = \frac{\sum_{i=1}^n w_i - \ell \sum_{i=1}^n A_i}{\ell \sum_{i=1}^n A_i}$$

On the basis of implicit

$$(II)' \quad \mu_1 w_1 + \mu_2 w_2 + \dots + \mu_n w_n = \ell \sum_{i=1}^n A_i = U$$

he states:

$$(I4) \quad (I+r)U = I$$

or

$$(I5) \quad r = \frac{I - U}{U} \quad " 39/$$

that is implied in

$$r = \frac{\sum_{i=1}^n w_i - \ell \sum_{i=1}^n A_i}{\ell \sum_{i=1}^n A_i}$$

At this point, von Bortkiewicz asserts himself as a visionary, deriving from (I5) a conclusion of fantasy:

"It is this particular expression  $\lceil (I5) \rceil$  of the rate of surplus value which plays an important part in Das Kapital 21/. The rate of surplus value appears here as the proportion between 'surplus labour' and 'necessary labour', or as the ratio between the two parts of the working day in which the surplus value and the worker's necessities, or the equivalent of these necessities, are

39 Von Bortkiewicz, 1952, p. 15. The confusion between aggregate expressions of commodity values, i.e. (I4) and (I5), with individual ones, i.e. (8) and (I0), is ostensible. Their ascribed roles are constantly interchanged, while no warning is given to the reader.



produced.

21 Das Kapital, I, pp. 542-546." (1952, p. 15)

But even according to common sense, in "this particular expression", i.e. expression (I5), the rate of "surplus value" appears not as the proportion between "surplus value" and "necessary labour", but as the proportion by which an assumed whole value of commodities has been arbitrarily diminished while it is being divided by the diminution itself.

Certainly, a corresponding degree of boldness is required to state that a diminished proportion, the complement of an index, divided by such diminution is "a ratio", a quantitative relation between two magnitudes. Von Bortkiewicz has discovered that a ratio is a quantitative relation between an index and itself.

We have also learnt in passing, that the diminished proportion is, by the way, an increased proportion, or "surplus value". Hence, a markup is a corresponding mark down, following von Bortkiewicz's circular considerations.<sup>40/</sup>

<sup>40</sup> A similar seesaw is repeated elsewhere:

"The substance of Marx's analysis can be summarized in a simple parable [!], in which the economy is described as an aggregation of industries each of which contributes to a storehouse [?] containing total surplus value [!!]. The contribution of each industry is its total output minus the consumption of its labor force. If we use labor units to measure these quantities, each industry's contribution is proportionate to the quantity of labor it uses, for reasons to be noted in a later footnote [!]: With working days everywhere equal, total value production per laborer (measured in hours of 'socially necessary labor') must also be equal. Subtract from this in every industry the same subsistence wage (also measured in value units), and we are left with the same value per worker everywhere (p. 55 n.)]. This, then, is how society's surplus value is produced." (Baumol, 1974, p. 53) Professor Baumol's imagery claims that surplus value is to be first assumed in a storehouse containing all of it (which von Bortkiewicz denotes as  $rU$ ). It -the surplus value- would be equal to total output of each "industry" minus a proportionate subtraction (i.e.,  $I - U = rU$ ), as we are left with the same surplus value per worker ( $rU$ ) everywhere. Professor Baumol proceeds to repeat once again his simple parable by enlightening us on

"The distribution of society's surplus value from the central storehouse [which] now takes place via the competitive process which assigns to each industry for profit interest payment, and rent an amount strictly proportionate to its capital investment. This is the heart [!] of the transformation process -the conversion of surplus value into profit, interest, and rent. It takes from each according to its work force, and returns to each according to its total investment." (1974, p. 53)

An analogous parable is provided by Schumpeter:

In his systematic confusion, he makes a quid pro quo as he takes the working day for a commodity. This is in so far as expression (15) is a manipulation of (7), referring to the value of one commodity (or to the value of all commodities) and not to the working day, as he claims. Moreover, his blunder is fulfilled twice as he also takes the commodities for working days, i.e. units of absolute labour time. Such a tumult of "absolute value" -or its indexes, is "solved" by means of unyielding identities, as exposed above.

While we have already seen that von Bortkiewicz's written exposition does not agree with his notation, let us point further that at the question, whence such "surplus value," von Bortkiewicz at once grows embarrassed. In actual fact, he has claimed above that "the rate of surplus value appears here as the proportion between 'surplus value' and 'necessary labour'".<sup>41</sup> As he might have known,

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"If we place ourselves on Marx's standpoint, as it is our duty in a question of this kind [the problems which are created by the discrepancy between the labor theory of value and the plain facts of economic reality], it is not absurd to look upon surplus value as a 'mass' produced by the social process of production considered as a unit and to make the rest a matter of the distribution of that mass. And if this is not absurd, it is still possible to hold that relative prices of commodities, as deduced in the third volume, follow from the labor-quantity theory on the first volume... But Marx stands to gain too little by being cleared of contradiction. The remaining indictment is quite strong enough. The best contribution to the whole question of how values and prices are related to each other in the Marxian system... is L. von Bortkiewicz, 'Wertrechnung und Preisrechnung im Marxchen System,' Archiv für Sozialwissenschaft und Sozialpolitik, 1907." (1976, p. 29 n.) Both Schumpeter and Professor Baumol deceive themselves by dis-integrating dexterously the mass of surplus value from the value of the product, of which, in fact, it forms an integral and inseparable component:

"What finally goes out of circulation is not on the one hand the original value £100, and on the other the surplus-value £10; it is the £110, which is found in the same form and under the same conditions as the original £100, and is ready to recommence the process of augmentation (e).

(e) 'Capital divides itself into two parts, the original capital and the profit, the increase of capital. But in practice the profit is joined afresh to the capital and put into circulation together with it' (F. Engels, Umriss zu einer Kritik, Paris, 1844, p. 99)." (Marx, 1908, p. 113)

Further, as does von Bortkiewicz, Professor Baumol and Schumpeter ingeniously turn magnitudes of value and surplus value into mere indexes.

41 1952, p. 15.

the task of a scientific analysis is to explain whence and how surplus value is produced, and not to exclaim that it merely "appears"; that it merely happens. To state that it merely appears amounts to naiveness and ignorance or -even worse- to forgetfulness. But in spite of von Bortkiewicz's explanation -if explanation it can be called- all that he has to say is that it "appears." All that is needed is blind and implicit faith in his revelations on the part of those who might follow his vacuous expressions.

Anybody with a passing acquaintance of Marx knows that the rate of surplus value is precisely a ratio between two of the three component parts of the value of commodities, i.e., surplus value and variable capital, in which the value created in the working day -and embodied in the commodities- is divided.

On the contrary, von Bortkiewicz is arguing that "surplus value" is not a magnitude, but itself a percentage by which one single numeral "happens" to shoot out of the numeral itself, in a mysterious appearance. An unexplained begetting. Moreover self-contained. Hence, "surplus value" contains in itself a rate, i.e.

$$r\ell \sum_{i=1}^n A_i$$

Let us take this expression as such, designated as "surplus labour" by von Bortkiewicz. If divided by "necessary labour", he discovers what he has already assumed: not a relation between two determinate magnitudes, but a most sterile and obtrusive self-relation. Hence,

$$\frac{r\ell \sum_{i=1}^n A_i}{\ell \sum_{i=1}^n A_i} = r$$

as

$$r = r$$

Anybody familiar with the rudiments of Capital, would



point out that as the surplus value is divided by the variable capital, the relation established is the rate of surplus value, i.e.

$$\frac{s}{v} = s'$$

and not

$$r = r$$

as von Bortkiewicz appears to have found.

We confirm that it is beyond von Bortkiewicz's strictures to be able to express the rate of surplus value as a relation between the mass of surplus value and the magnitude of variable capital. In his exposition, surplus value -exclusively depicted as a rate-, is expressed as a fragmentary part of the product of value. Marx discloses what this procedure conceals:

"The habit of representing surplus-value and value of labour-power as fractions of the value created -a habit that originates in the capitalist mode of production itself, and whose import will hereafter be disclosed- conceals the very transaction that characterises capital, namely the exchange of variable capital for living labour-power, and the consequent exclusion of the labourer from the product. Instead of the real fact, we have the false semblance of an association, in which labourer and capitalist divide the product in proportion to the different elements which they respectively contribute towards its formation. 1/

1 All well-developed forms of capitalist production being forms of co-operation, nothing is, of course, easier, than to make abstraction from their antagonistic character, and to transform them by word into some form of free association, as is done by A. de Laborde in De l'Esprit d'Association dans tous les intérêts de la Communauté, Paris, 1818. H. Carey, the Yankee, occasionally performs this conjuring trick with like success, even with the relations resulting from slavery."  
(Marx, 1918, p. 584) 42/

42 In a peculiar syncretism, Rubin (1972, pp. 237, 238) finds that surplus value is "determined" as a fraction of the value created:

"Surplus value is determined by the difference between total labor and paid labor, namely by the unpaid or surplus labor. However, as we explained above, it is erroneous to represent the problem /? as if the surplus labor, as if the material activity, 'created' surplus value as a property of things."

Leaving aside Rubin's obscure clarification, what it is erroneous is the circularity of surplus value being "determined" as a part of the value product. In order to confirm himself, and in spite of

Let us bear in mind that formula

$$(15) \quad r = \frac{I - U}{U}$$

or the ones we derived from it, can just

"express, in reality, only the proportion in which the working-day, or the value produced by it, is divided between capitalist and labourer. If they are to be treated as direct expressions of the degree of self-expansion of capital, the following erroneous law would hold: Surplus-labour or surplus value can never reach 100%. 1/ Since the surplus-labour is only an aliquot part of the value created, the surplus-labour must necessarily be always less than the working-day, or the surplus-value always less than the total value created. In order, however, to attain the ratio of 100:100 they must be equal. In order that the surplus-labour may absorb the whole day (i.e., an average day of any week or year), the necessary labour must sink to zero. But if the necessary labour vanish, so too does the surplus-labour, since it is only a function of the former. The ratio

<u>Surplus-labour</u>		<u>Surplus-value</u>
Working day	or	Value created

can therefore never reach the limit of 100/100, still less rise to  $100 + x / 100$ . But not so the rate of surplus-value, the real degree of exploitation of labour.

1 Thus, e.g., in Dritter Brief an v. Kirchmann von Rodbertus. Widerlegung der Ricardo'schen Theorie von der Grundrente und Begründung einer neuen Rententheorie. Berlin, 1851. I shall return to this letter later on; in spite of its erroneous theory of rent, it sees through the nature of capitalist production.

Note by the Editor of the 3rd. Edition. It may be seen from this how favourably Marx judged his predecessors, whenever he found in them real progress, or new and sound ideas. The subsequent publication of Rodbertus' letters to Rud. Meyer has shown that the above acknowledgement by Marx wants restricting to some extent. In those letters this passage occurs: 'Capital must be rescued not only from labour, but from itself, and that will be best effected, by treating the acts of the industrial capitalist as economical and political functions, that have been delegated to him with his capital, and by treating his profit as

Marx, he goes on to represent the value of labour power confined to a fraction of the value created, within which it fluctuates:

"Surplus value arises because the labor [should read: labor power] which is expended by workers in the process of production is larger than the labor necessary for the production of their subsistence fund. This means that the surplus value increases to the extent that the labor [should read: labor power] expended in production increases and the labor necessary for the production of the worker's subsistence fund decreases." (p. 237)

Further, and in an attempt to vulgarize Marx, Rubin employs the word "labor" improperly as a synonym of "labor power."

a form of salary, because we will still know no other social organisation. But salaries may be regulated, and may also be reduced if they take too much from wages. The irruption of Marx into Society, as I may call his book, must be warded off.... Altogether, Marx's book is not so much an investigation into capital, as a polemic against the present form of capital, a form which he confounds with the concept itself of capital.<sup>43</sup> (Briefe, &c., von Dr. Rodbertus-Jagetzow, herausgg. von Dr. Rud. Meyer, Berlin, 1881, I, Bd. p. 111., 48. Brief von Rodbertus.). To such ideological commonplaces did the bold attack by Rodbertus in his 'social letters' finally dwindle down." (Marx, 1918, pp. 582, 583)

While the rate of surplus value is a function of the rate of surplus value in von Bortkiewicz, let us see how far we can be led by applying his tenets.

First, let us take one of his  $n$  commodities at random, say commodity 451.<sup>43/</sup> On the basis of (7):

$$w_{451} = A_{451}\ell + rA_{451}\ell$$

which can be written in the form of

$$w_{451} = (1+r)A_{451}\ell$$

Von Bortkiewicz has told us that in expressing the value of a good, "more exactly, wage labour...can be used as such a measure of value"<sup>44/</sup>. And that a good "or its equivalent, could pay the wages for  $\lceil A \rceil$  days of labour"<sup>45/</sup> of that good, say  $w_{451}$ .

Let us further assume that if 2 units of commodity, say  $w_{007}$  are given in exchange for 1 unit of commodity  $w_{451}$ , such proportion of 2:1 -and vice versa, is to mean that  $w_{451}$  "requires for its production time twice the labour required for the production of"<sup>46/</sup> commodity  $w_{007}$ .

Further, he told us that due to some undisclosed

<sup>43</sup> While we designate commodities by means of ordinal numerals, we follow von Bortkiewicz's precepts as we confirm his obliteration of the use-value of the commodity-or commodities-under consideration. This is in contravention to Marx, as

"Value is independent of the particular use-value by which it is borne, but it must be embodied in a use-value of some kind."

(1918, p. 209); and not simply by a subindex.

<sup>44</sup> 1952, p. 5.

<sup>45</sup> 1952, p. 5; rectangular parentheses substitutes A for "12".

<sup>46</sup> 1952, p. 6.



prerogative, both holders of, say, commodities  $w_{451}$  and  $w_{007}$ , would exchange them among each other with a nominal surcharge: "if we assume the rate of surplus value [sic] to be 50%, for instance",<sup>47/</sup> which is to be levied over and above wages. Given the value of wages, which so far as we know is to be represented by  $A_{451}$  and  $A_{007}$  for each unit of the respective commodities, indeed their value can pay the corresponding wages, as he has told us. And there is no reason why they should not be paid, assuming, of course, that the exchange of both commodities  $w_{451}$  &  $w_{007}$  is accomplished.

Let us observe the matter more closely. If both parties holding  $w_{451}$  &  $w_{007}$  exchange their commodity products in the above ratio, both are so shrewd -according to von Bortkiewicz-, that they have sold their commodities at a value comprising the same proportional surcharge. Before the transaction was fulfilled, the value of their commodities, using wage labour as such a measure of value, was given. After the operation, their value remains the same.<sup>48/</sup> All that has happened is that in order to exchange such commodities, they have done each other the favour of circulating them with a quantity of money 50% higher than it would have been needed, while no surplus value has been obtained.

"Turn and twist as we may, the fact remains unaltered. If equivalents are exchanged, no surplus-value results, and [even] if non-equivalents are exchanged, still no surplus-value. 1/ Circulation, or the exchange of commodities, begets no value. 2/

1 'L'échange qui se fait de deux valeurs égales n'augmente ni ne diminue la masse des valeurs subsistantes dans la société. L'échange de deux valeurs inégales...ne change rien non plus à la somme des valeurs sociales, bien qu'il ajoute à la fortune de l'un ce qu'il ôte de la fortune de l'autre.' J.B. Say, l.c. t. I., pp. 344, 345.) Say, not in the least troubled as to the consequences of this statement, borrows it, almost word for

47 1952, p. 6. "For Proudhon however, as we shall see, the surplus is a surcharge. Altogether his criticism is that of a novice, he has not mastered the first elements of science he intends to criticise." (Marx, 1971, p. 523)

48 In Chapter III we have already exposed that the capitalists cannot obtain a surplus value by means of a nominal markup on the wage outlay. The outcome would be that far from becoming any richer, the sum of commodity values they throw into circulation would not change, while a portion of their fortunes would take the unprofitable form of means of circulation to the very amount of the markup by which commodity values have been surcharged.

word, from the Physiocrats, in his day quite forgotten, for the purpose of expanding the 'value' of his own. His most celebrated saying, 'On n'achète des produits qu'avec des produits' (l.c., t. II., p. 438) runs as follows in the original physiocratic work: 'Les productions ne se paient qu'avec des productions.' (Le Trosne, l.c., p. 899.)

2 'Exchange confers no value at all upon products.' (F. Wayland: The Elements of Political Economy, Boston, 1853, p. 168.) (Marx, 1918, pp. 181, 182)

In other words, while one unit of commodity

$$(8)i \quad w_{451} = (I+r)A_{451}\ell$$

is given in exchange for 2 units of commodity

$$(8)ii \quad w_{007} = (I+r)A_{007}\ell$$

in actual fact each holder would be exchanging commodities whose value would not be altered by means of a nominal surcharge which amounts to

$$rA_{451}\ell$$

and to

$$rA_{007}\ell$$

respectively.

Such a superfluous amount of circulation required could be employed, instead, to circulate commodities of a value  $r$  percent higher. Meanwhile, the nominal constant surcharge of both commodities cancels out as far as the factual value of 8(i) and 8(ii) is concerned. While no surplus value has been obtained, a considerable quantity of money in the form of means of circulation would have been unproductively diverted in an unyielding exercise. We simply confirm that

"If commodities, or commodities and money, of equal exchange value, and consequently equivalents, are exchanged, it is plain that no one abstracts more value from, than he throws into, circulation. There is no creation of surplus value."  
(Marx, 1918, p. 178)

The nominal increase that both parties holding  $w_{451}$  and  $w_{007}$  invest to their products respectively, requires each other to put into

circulation the same amount by which they surcharge their commodities.<sup>49/</sup>

Now, let us proceed to find what is implicit in the above exchange for two commodities. On the basis of

$$(9) \quad \sum_{i=1}^n w_i = \sum_{i=1}^n (1+r) \ell A_i$$

Here,

"The nett result is, that all owners of commodities sell their goods to one another at  $\sum_{i=1,2,\dots,n} r A_i \ell$  above their value, which comes precisely to the same as if they sold them at their true value."

(Marx, 1918, p. 179; rectangular parenthesis substitutes "10%" in the original)

According to von Bortkiewicz, all owners of commodities sell the goods among themselves at

$$\sum_{i=1}^n r \ell A_i$$

above their value.

In respect of this nominal surcharge, Marx further observes that

"Such a general and nominal rise of prices has the same effect as if the values had been expressed in weight of silver instead of in weight of gold. The nominal prices of commodities would rise but the real relation between their values remain unchanged." (1918, p. 179)

In other words, no surplus value can be obtained by an all round surcharge upon values.

Finally, let us apply the latter implication to von Bortkiewicz's earlier nomenclature. He has stated that

$$(I) \quad W = \alpha c + v + m$$

<sup>49</sup> It is unfounded to claim that here, we have to change numéraire while referring to the expressions under consideration. It denotes unawareness that in (7), (8) and (9), von Bortkiewicz is regarding commodities without any explicit numéraire commodity, viz.,

(IO)  $w_\gamma = 1$  coming to the fore, so far. Furthermore, we simply adhere to von Bortkiewicz's procedure and exposition.



where

$$\alpha c = 0$$

as derived at the beginning of this chapter. Then

$$(I)' \quad W = v + m$$

By substituting (9)' in (I)',

$$\sum_{i=1}^n (I+r)\ell A_i = v + m$$

In so far as

$$m = rv$$

and

$$m = \sum_{i=1}^n r\ell A_i$$

then

$$\sum_{i=1}^n \ell A_i = v$$

We have already observed that the surplus value, whether it is expressed as  $rv$ ,  $m$ , or

$$\sum_{i=1}^n r\ell A_i$$

would not materialize in a higher value of commodities upon which it has been surcharged.

In rounding up von Bortkiewicz's observations, it would be pertinent to remind ourselves that if two trading parties which engage in exchange both obtain either the same or an unequal markup, what they both obtain remains of the same value, both before and after the transaction -or transactions.

"It is evident that no change in the distribution of the circulating values can augment their total, any more than a Jew can increase the total quantity of precious metals in a country by selling a Queen Anne farthing for a guinea. The entire capitalist class of any country cannot possibly overreach itself(ff).

ff Destutt de Tracy, although (or perhaps because) a Membre de l'Institut, was of the contrary opinion. According to him industrial capitalists derive their profits because 'they all sell for more than it has cost to produce. And to whom do they sell? In the first place to one another.' (l.c. p. 239)" (Marx, 1908, p. 124; translation from French revised) 50/

If all the capitalists were to follow von Bortkiewicz's dictum, this means that they would "draw" a nominal "surplus value" in the very process of exchange, by selling to each other dearer than what it has cost them. That is to say, by deceiving each other in selling mutually among themselves at a markup.

Von Bortkiewicz has failed to explain the nature and size of his putative markup, i.e. "surplus value". Either he was generously willing to spread his ignorance unrequested, or to leave it to the generative powers of the consumer of his written labours. Of one question we are certain: that the product of an index (i.e. "surplus value") out of another index (i.e. "wage outlays") remains more mysterious than ever.

Finally, it is important to note that the objections made to any author have as a premise an understanding of the subject-matter, before those observations enter into circulation and hence, come to light. Therefore, such understanding is a previous condition of its circulation and not its result; including the fading nature of all ulterior markups.

## 6. Two standards of account; no measure of value

Let us return to "equation"

$$(7) \quad w = A\ell + rA\ell$$

In so far as all the commodities are composed of a formula of the

50 And from where do they get their profits? Well, "Of course, the circulation process adds  $\angle ! \angle$  to the money price  $\angle ! \angle$  of a commodity. As long as Value and price are kept conceptually separate, this presents no problems at all." (Shaikh, 1977, p. 138 n. 22) Is exchange, then, an admirable transaction? Indeed; "In commodity producing societies the object of production is not direct use, but personal gain  $\angle ! \angle$  through exchange  $\angle ! \angle$ ." (Shaikh, 1977, p. 115)

same structure, von Bortkiewicz provided us with

$$(9) \quad \left\{ \begin{array}{l} w_1 = (I+r)\ell A_1 \\ w_2 = (I+r)\ell A_2 \\ \cdot \quad \cdot \quad \cdot \quad \cdot \quad \cdot \\ \cdot \quad \cdot \quad \cdot \quad \cdot \quad \cdot \\ w_n = (I+r)\ell A_n \end{array} \right.$$

Here, von Bortkiewicz is claiming that the value of commodities is regulated by wages. Further, he made an about turn, claiming that wages are regulated by the value of commodities, viz.,

$$(II) \quad \mu_1 w_1 + \mu_2 w_2 + \dots + \mu_n w_n = \ell$$

"Here we come to a standstill. Of course, to a standstill if we try reasoning logically. Yet the propounders of that doctrine make short work of logical scruples. Take our friend Weston, for example. First he told us that wages regulate the price of commodities [i.e. (9)], and that consequently when wages rise prices must rise. Then he turned round to show us that a rise of wages will be no good because the prices of commodities had risen, and because wages were indeed measured by the prices of the commodities upon which they are spent [on the basis of (II)]. Thus we begin saying that the value of labour determines the value of commodities, and we wind up by saying that the value of commodities determines the value of labour. Thus we move to and fro in the most vicious circle, and arrive at no conclusion at all." (Marx, 1973, p. 30)

At the same time, von Bortkiewicz has slipped two standards of account:

a) on the basis of (9), "by considering that amongst the  $n$  goods, there is also that which serves as measure of value, or as money. Let  $\gamma$  be the ordinal number of this good. Then:

$$(IO) \quad w_\gamma = I \quad \text{" 51/."}$$

b) on the basis of (II), "One can, however, equally well say that the real wage is constituted by certain quantities ( $\mu_1, \mu_2, \mu_3 \dots \mu_n$ ) of all the  $n$  goods, where some of these quantities equal zero. The value of this complex of goods known as the real

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51 1952, p. 14.



wage, is clearly identical with the money wage." <sup>52/</sup> Hence,

$$(II)' \quad \mu_1^w w_1 + \mu_2^w w_2 + \dots + \mu_n^w w_n = \ell \sum_{i=1}^n A_i = U$$

"U clearly should read: obviously (Offenbar) means the amount of labour embodied in the complex of goods forming the real wage." <sup>53/</sup>

Von Bortkiewicz endlessly goes from pillar to post, from (IO) to (II)' -and vice versa. Further, he has made U -which he also calls "necessary labour"- tantamount to the means of consumption of the labourers. This is in so far as he supplants the means of subsistence for the "value" of wage labour. Furthermore, he takes the labourer himself for the value of his necessities.

"On the whole it is evident that by making the value of one commodity, say labour, corn, or any other commodity [viz,  $w_\gamma$ ], the general measure and regulator of value, we only shift the difficulty, since we determine one value by another, which on its side wants to be determined." (Marx, 1973, p. 30)

Von Bortkiewicz does this although Ricardo had himself remonstrated Smith a century and a half ago for using double standards of value:

"Sometimes he speaks of corn, at other times of labour, as a standard measure; not the quantity of labour bestowed in the production of any object, but the quantity which it can command in the market" (Ricardo, 1951a, p. 14)

It is not enough either, that after Marx emphasizes Ricardo's protest, <sup>54/</sup> Proudhon is exposed for turning a blind eye to Ricardo's refutation.

"It is beyond doubt that M. Proudhon confuses the two measures, measure by the labour time needed for the production of a commodity and measure by the value of the labour. 'Any man's labour,' he says, can buy the value it represents.' Thus, according to him, a certain quantity of labour embodied in a product is equivalent to the worker's payment, that is, to the value of labour. It is the same reasoning that makes him confuse cost of production with wages.

'What are wages? They are the cost price of corn, etc., the integral price of all things. Let us go still further. Wages are the proportionality of the elements which compose wealth.'

What are wages? They are the value of labour.

52 1952, p. 15.

53 1952, p. 15.

54 See, for instance, Marx, 1978, p. 41.

Adam Smith takes as the measure of value, now the labour time needed for the production of a commodity, now the value of labour. Ricardo exposes this error by showing clearly the disparity of these two ways of measuring. M. Proudhon outdoes Adam Smith in error by identifying the two things which the latter merely put in juxtaposition." (Marx, 1978, p. 50)

If we were to follow von Bortkiewicz's advice, by taking into account (IO) in (II), whereby "The value of this complex of goods known as the real wage  $\lceil$ , i.e. (II)  $\rceil$ , is clearly identical with the money wage",<sup>55/</sup> we get

$$(II)'' \quad \mu_1 w_1 + \mu_2 w_2 + \dots + \mu_n w_n = \ell = \mu_\gamma w_\gamma$$

Likewise, we get

$$(II)''bis \quad \nu_1 w_1 + \nu_2 w_2 + \dots + \nu_n w_n = r\ell = \nu_\gamma w_\gamma$$

where the surplus is formed by certain quantities of some of the  $n$  goods. "The value of this complex of goods known as the  $\lceil$  capitalist's goods form the complement of  $\rceil$  the real wage" <sup>56/</sup>.

Therefore, all the  $n$  goods could be expressed as

$$(\mu_\gamma + \nu_\gamma) w_\gamma = \sum_{i=1}^n (1+r) \ell A_i$$

However, if it is the prerogative for the holders of commodities of selling  $w_i$  ( $i=1,2,\dots,n$ ) with a nominal surcharge from what their value is, it would simply make impossible to increase the existing commodity values. The capitalist -or capitalists- would simply reimburse to himself -or each other- the surcharge in means of circulation over and above

$$\mu_\gamma w_\gamma = \sum_{i=1}^n \ell A_i$$

Such surcharge would amount to

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55 1952, p. 15.

56 1952, p. 15.

$${}^v\gamma w_\gamma = \sum_{i=1}^n r\ell A_i$$

In spite of this exercise, the deceived would be the capitalists themselves, to whom the surcharge in terms of  $w_\gamma$  would have had to return without augmenting the stock of commodities. Indeed,

"That is not the way to get rich or to create surplus-value."  
(Marx, 1918, p. 181)

The capitalists as a whole might have found themselves with a superávit or surplus amounting to

$$\sum_{i=1}^n r\ell A_i$$

at the end of the process in means of circulation, but with no commodity values available for their consumption, either individual or productive. Thus, it is difficult to understand by following von Bortkiewicz's precepts, how the capitalist class could consume any commodity whatsoever. Rather it would cease to exist as a class.

Finally, let us observe that von Bortkiewicz was careful enough not to advance (II)'bis or (II)''bis explicitly, although both expressions are implicit in him. They have the convenience of exposing the ethereal nature of the "consumption goods of the capitalist class".

## 7. The system as a whole

Before we continue, let us summarize what has been exposed in Value-calculation.

The mere possibility of constant capital is precluded. At the same time, it is naively assumed that the wage labourer can create commodities by himself, without means of labour, i.e. object and instruments of labour. Nevertheless, constant capital is "brought in" with a convenient absence of explanation of its source, forgetting that wage labour is, by itself, sterile. Reproduction, manifestation and functioning of constant capital remain a mystery, unsolved and furthermore, unposed.

Value is explained in a circular fashion. Wage labour is



identified with worker's "goods" and it follows that a surplus is identical with capitalist's "goods", as the value of the "aggregate" of commodities would equal "wage labour" plus the surplus. This double inversion is performed twice. First, establishing the "value" of wage labour in the aftermath of the production process, only after the "goods" are readily available for distribution; dictating the value of the worker's commodities before their production can take place, as he presupposes a subsistence fund for the labourer. Second, establishing the value of the commodities consumed by the capitalist before they have been produced; determining a surplus before it has even been realized in the market.

In the name of money, a new tautology is introduced, by which wage labour is reciprocal to the surplus it must leave, while it is claimed that the latter is a direct proportion of wage labour itself.

A surplus rate vanishes as soon as von Bortkiewicz's very assumptions are followed.

Double standards of account are advanced while the determination of the value of the commodity is evaded by means of labour time as such.

#### a. An implicit blueprint

The blueprint of Value-calculation in von Bortkiewicz would amount to the following:

$$w_{II} = \left[ \sum_{i=1}^n A_i \ell(I+r) \right]_{II}$$

$$w_{III} = \left[ \sum_{i=1}^n A_i \ell(I+r) \right]_{III}$$

Here, II refers to immediate consumption of workers' "goods", and III represents, initially, capitalist consumption "goods".

I, where "means of production are -or would be- produced" is missing for no other reason than that it does not exist. It is a dummy for von Bortkiewicz, who has absolutely outlawed it in the

name of planting objections to Marx, as shown above. The exposure of this model is important for the subsequent treatment of this question, both in the next chapter and in the last part of this work.

On the basis of von Bortkiewicz's assumed proportionality between the wage outlay and the rate of surplus value,

$$w_{II} = \left[ \sum_{i=1}^n A_i \ell (I+r) \right]_{II} = \sum_{i=1}^n A_i \ell$$

and

$$w_{III} = \left[ \sum_{i=1}^n A_i \ell (I+r) \right]_{III} = r \sum_{i=1}^n A_i \ell$$

whereby the wage outlay ( $w_{II}$ ) is to be identical with worker's consumption goods, identical in turn to the money wage in a presupposed proportionality.

Further, the capitalist's consumption goods ( $w_{III}$ ) is made identical to surplus value (nominally raised upon wages), identical to "capital gains", also in a presupposed proportionality.

## CHAPTER VI

### PRICE-CALCULATION

Let us proceed to analyse his alternative principle of accounting, which he exposes as follows:

"We shall now consider prices. According to Marx's [calculation] model [(Rechenschema)], reproduced at the beginning of this article, prices would be equal to [would coincide with (zusammenfallen)] values, were it not for constant capital. This would, however, be valid on the assumption that the turnover period of variable capital is the same in all lines of production. At this point, when we are trying to reach a wider generalization of our theoretical study, we must emancipate ourselves from this assumption."  
(von Bortkiewicz, 1952, p. 16)

Here, von Bortkiewicz is claiming that prices do not coincide with values, due to constant capital.

Further, that prices do not coincide with values due to different turnover periods of variable capital in different lines of production; an assumption which he is going to uphold henceforth.<sup>1/</sup> For him, "trying to reach a wider generalization",<sup>2/</sup> means to pay attention to narrow, accidental and individual differences in the turnover period of his variable capital. We will observe that far from analysing the phenomena in all their purity, he is explicitly determined to analyse them in all their corruption. He claims to take account, from now on, of fortuitous eventualities, while we take note of his way of proceeding.

The model (or scheme) of Price-calculation -nowhere existing in Marx as far as his proofs are concerned- is expressed as follows by von Bortkiewicz:

"let  $c$  be the value of the constant capital,  $v$  that of variable

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1 While von Bortkiewicz exclusively refers to the turnover period of variable capital, he omits here any mention whatsoever of the turnover period of capital as a whole, including constant capital itself. This obliteration is not new. So far, for him, all capital is composed by variable capital in which case no constant capital and hence no production -or lines of production- could exist.

2 Emphasis added.



capital" 3/; " $\alpha$  the fraction of the constant capital entering into the value of the product" 4/; "[P is] the (production) price" 5/ and "we shall describe by  $q$  [what] Marx calls average rate of profit. The latter prevails -according to the principles [should read: principle] of price-calculation- not only in all the spheres of production taken together, but in each sphere of production, for

$$(4) \quad P = \alpha c + v + q(c+v) \quad " 6/$$

As can be seen, according to von Bortkiewicz's presentation of the principle of Price-calculation here, profits shoot out as a markup upon capital as a whole.<sup>7/</sup>

Von Bortkiewicz would have to prove how in Price-calculation constant capital is created instantaneously, while it vanishes in Value-calculation.

According to von Bortkiewicz, the rate of profit would have no source, because in his Value-calculation there is no constant capital with which the labourer can work, and produce not just no rate of surplus value, but no product whatsoever. A groundless profit.

But these various points were already implicit in Value-calculation, whence they follow. What is tangible is that the rate of profit would have no basis at all, in so far as it cannot arise from Value-calculation, where surplus value and constant capital is non-existent, and labour is constituted by a simple numeral devoid of content.

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3 1952, p. 6.

4 1952, p. 6.

5 1952, p. 7.

6 1952, p. 7.

7 In Value-calculation, a surplus was presented as a markup shooting out from "wage outlays", i.e.

$$W = v + rv$$

derived from

$$W = \alpha c + v + m$$

in so far as

$$m = rv$$

and

$$\alpha c = 0$$

Let us observe that in either case, i.e. Price-calculation or Value-calculation, whether a surplus or whether a profit, it is presented as a markup upon the outlay on wages.

## I. Non-existence of constant capital

In general, he merely repeats with minor alterations Value-calculation under the new name of Price-calculation:

"We shall first look for the price of the unit of any commodity which is produced with the help of variable capital only. Let  $p$  be this price,  $A$  the amount of labour required (just as in Value-calculation),  $\lambda$  the wage rate,  $\rho$  (as formerly) the rate of profit, and  $t$  the turnover period. As we have in view the final price, i.e. the price at which the commodity will be sold to the consumer, we must regard the turnover period as starting with the moment when wages are paid, and ending at the moment of the sale of the commodity to its final buyer... [8/] We provisionally assume that total wages ( $A\lambda$ ) are paid at one moment of time."  
(von Bortkiewicz, 1952, pp. 16, 17) 9/

We can just observe once again, in Price-calculation, the absurdity of producing one commodity without means of labour, i.e. without constant capital -so far.

The idea that wages are paid all at the same time, again fits neatly for his conversion of constant capital into "direct labour". It conceals the proposition that a capitalist sets his labour to work without means of labour, precluding any instruments

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8 "We assume in the following... (f) that each production process is of point-input-point-output type; inputs are made at the beginning of the production period and outputs are obtained at the end of the period, so that labour is used only once in each production period." (Morishima, 1973, p. 12)

9 Let us bear in mind that von Bortkiewicz is assuming that it is the individual consumer who determines the price of the commodity independently of the "weather" in the market, no matter what the social needs satisfied by his commodities or the socially necessary labour time embodied in them. For him, like Proudhon, he makes people go out for a walk in order to enjoy an eternal spring. He forgot that each capitalist -or groups of capitalists- operates independently and privately of the rest, and that the price of the commodity is to be determined in the market, and not in his "direct labour" accounting which presumably the consumer is to perform. At the same time, he precluded competition taking place. He is visionary enough to have the final price before the commodity reaches the market. For him, commodities do not have to prove in the market: i) that they are use-values capable of fulfilling a social need, and which necessarily have to realize themselves at their value as commodities; ii) that the different skills of the labourers producing the commodities undergo a process of equalization in the higgling and bargaining of the market regardless of his restricted and narrow calculation which assumes the non-existence of different skills; iii) that the private labour embodied in them will have to assert itself as social labour. For von Bortkiewicz, proportionality or "general (economic) equilibrium" is presumed, in which case bankruptcy would have been the lesson he would have been taught if he had dared to participate in the market place, alongside Proudhon and Walras.

of labour or objects of labour. Von Bortkiewicz resorts to production ex nihilo, ending where he started: in the void.

He has to return to a savage every time he speaks of the modern mechanic, in his "direct labour" assumptions. What is most absurd is that if such a savage, or "direct labour" is to become a modern mechanic, this "conversion", which by the way, has taken a few hundred of thousands of years, breaks completely with any fixed productivity of labour, such as is implicit in von Bortkiewicz's argument. Once it is accepted that labour productivity allows the producer to produce more use-values in the same -or even in less- amount of time, his "historical" references to "direct labour" are otiose, superfluous, concealing a perennially static and frozen productive capacity to labour. Also it suggests an incapability in explaining its growth or eventual decrease. In other words, there is a contradiction in terms between von Bortkiewicz's presupposed unique productivity of labour (viz., a sole rate of surplus value in Value-calculation<sup>10/</sup> and a sole rate of profit in Price-calculation<sup>11/</sup>) and a simultaneous regression of "indirect labour" into "direct labour." Either he operates under the assumption of static productivity of labour, in which case is not possible to increase the productivity of labour of a savage and turn it into a modern mechanic, or if the modern mechanic and its concomitant increase in his productivity is to be explained, a petrified and stiff productivity of labour would expose its inadequate explaining power.

Neither the capitalist nor the individual consumer is faced with imaginary "direct labour"; moreover, they could not care less about their primitive ancestors, whatever von Bortkiewicz might have thought in his putative regressions.

Let us continue with his application of what appears like a palaento-economical doctrine of Price-calculation, in order to discover, also, his equally personal brand of algebra.

The average rate of profit is proficiently evaded, since

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10 "(I+r)ℓ is the same for all products or goods and appears, for that reason, as a factor of proportionality." (1952, p. 14)

11 "Thus, for each value of t, profit would be expressed by

$\{(I+q)^t - I\} \Delta \lambda$ ." (1952, p. 17). It will be considered subsequently, that von Bortkiewicz does not provide any basis for equalization of the rate of profit; he simply presupposes it.



von Bortkiewicz slips it into his argument without explanation either of its nature or of its size. At the same time, he moves forward from "direct labour" to the present, bearing not simple rates of expansion -like in Value-calculation-, but exponential powers. His eventual reasoning is truly prepotent: "there is nothing to prevent one". In his words:

"We provisionally assume that total wages ( $A\lambda$ ) are paid at one moment of time.

This sum of wages forms one component of price. The other is the capitalist's gain or the profit. A turnover period of 1 year would make profit equal  $\rho A\lambda$  (since  $\rho$  is the yearly rate of profit). Were the turnover period 2, 3 etc. years, profit would be not  $2\rho A$ ,  $3\rho A$  etc., but (because of compound interest)

$\{(1+\rho)^2 - 1\}A\lambda$ ,  $\{(1+\rho)^3 - 1\}A\lambda$  etc. In the theory of prices, just as in other regions of theory, there is nothing to prevent one from applying the principle of compound interest also to the case where the period after which interest is due, or the turnover period, is no longer expressed by an integral, but by a fractional number of years. Thus, for each value of  $t$ , profit would be

expressed by  $\{(1+\rho)^t - 1\}A\lambda$ ." (von Bortkiewicz, 1952, p. 17) 12/

Therefore, the "yearly" rate of profit is a spontaneous generation of von Bortkiewicz, as he can neither help advancing it nor explain it. His powerful assertion contrasts with the impotence to explain it. Abiding by his dual standards, he is not only advancing now compound indexes in Price-calculation. He has also put forward simple indexes in Value-calculation. Despite the discordant character of his alternative proposition, he finds a peculiar correspondence, as he states that

"Within the system of price-calculation, the equations:

$$(18) \quad p = A\lambda + \{(1+\rho)^t - 1\}A\lambda$$

and

$$(19) \quad p = (1+\rho)^t A\lambda$$

correspond to equations (7) and (8).

Thus, whilst the values of two commodities which embody the

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12 "Price was simply dazzled by the enormousness of the figures arising from geometrical progression. Since he regarded capital, without taking note of the conditions of reproduction and labor, as a self regulating automaton, as a mere number increasing itself (just as Malthus did with men in their geometrical progression), he could imagine that he had found the law of its growth in the formula  $s = c(1+i)^{\tilde{n}}$ , in which  $s$  stands for the sum of capital plus compound interest,  $c$  for the advanced capital,  $i$  for the rate of interest expressed in aliquot parts of 100, and  $\tilde{n}$  for the number of years in which this process takes place."  
(Marx, 1909, p. 465)

same amount of labour equal each other, this is not generally the case with the prices of such commodities, except on the condition that the turnover period should be identical for both commodities. When this is not the case, the commodity with the longer period will command a higher price. We thus receive a confirmation for an earlier assertion that prices do not equal values even when constant capital is completely absent 26/.

26 The variety of turnover periods, or, more precisely, the different durations of the turnover periods, imply in the system of value-calculation that the annual rate of surplus value varies with the lines of production."  
(von Bortkiewicz, 1952, p. 17)

After he has assumed what he tries to prove, i.e. the lack of correspondence between Value-calculation and Price-calculation,<sup>13/</sup> he confirms this inconsistency in so far as his assumed turnovers beget geometrical growth of "profits" in the latter, while they beget arithmetical growth of "surplus value" in Value-calculation <sup>14/</sup>.

However, we should note that at the same time, he finds himself explicitly speaking of constant capital being completely absent both in Value-calculation and in Price-calculation.

Both expressions (I8) and (I9) are incomplete -as far as his algebra is concerned. There are at least as many solutions as there are commodities. In other words, for  $n$  commodities there are in fact  $n(n)$  prices, following his assumed proportionality. He is concealing a wildly excited amount of solutions or helpless indetermination of his "equations". Moreover, both (I8) and (I9) as such, have no solution. There are always more unknowns than solutions, as  $q$  and  $\lambda$  are purported as unknowns in his "equations."

In Value-calculation he has presented us with a theory of "surplus value" that a hawker might have thought up. Simple markups. In Price-calculation he drops its simplicity in order to enrich it with geometric generative powers. Hence, the fetishism of commodities becomes, in him, both simple and compound,<sup>15/</sup> taking

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13 This actual lack of correspondence in facts does not stop him from speaking of correspondence, above.

14 It appears as if the anonymously launched Essay on the Principle of Population had found extensive application in his economics. This time not with diminishing, but certainly with increasing returns.

15 "In conclusion we present the following hodge-podge of the romantic Müller: 'Dr. Price's immense increase of compound interest, or of the self-accelerating forces of man, presuppose an undivided or unbroken order for several centuries, if they are to produce such enormous effects. As soon as capital is divided, cut up into

over capital itself.

Von Bortkiewicz is not satisfied with the idea that the price of commodities is constituted of wages paid at one moment of time, as he stated earlier. He decides that such price is composed exclusively of wages paid at several moments of time. Nevertheless, his "goods" remain undefiled by constant capital :

"Let us now consider the case where total wages  $A\lambda$  are not paid out at one moment, but at  $m$  different moments which precede the moment of the completion or of the sale of the product by  $t_1, t_2, t_3 \dots t_m$  units of time (i.e. years or fractions of years). Let  $a_1\lambda, a_2\lambda, a_3\lambda \dots a_m\lambda$  be the amounts paid out in wages at each of these moments. Formula (I9) will then obviously be replaced by:

$$(20) \quad p = (1+\varrho)^{t_1} a_1 + (1+\varrho)^{t_2} a_2 + \dots + (1+\varrho)^{t_m} a_m$$

and naturally

$$(21) \quad a_1 + a_2 + \dots + a_m = A \quad "$$

(von Bortkiewicz, 1952, pp. 17, 18)

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several independently growing slips, the total process of accumulating forces begins anew. Nature has distributed the progression of power over a course of about 20 to 25 years, which fall on an average to the share of every laborer (!). After the lapse of this time the laborer leaves his track and must transfer the capital accumulated by the compound interest of labor to a new laborer, having to distribute it as a rule among several laborers or children. These must first learn to vitalise and employ their share of capital, before they can draw any actual compound interest out of it. Furthermore, an enormous quantity of capital gained by bourgeois society is accumulated for many years, even in the most restless communities, and is not employed for any immediate expansion of labor, but rather entrusted to another individual, a laborer, a bank, a state, under the term of a loan, whenever a considerable amount has been gathered together. And in that case the one who receives it sets the capital into actual motion and draws compound interest out of it, so that he can easily agree to pay simple interest to the lender. Finally the laws of consumption, greed, waste, oppose those immense progressions, in which the forces of man and their products might increase, if the law of production or thrift were alone effective.' (A.Müller, l.c., II, p. 147-149)

It is impossible to concoct a more hair-raising nonsense in a few lines. Leaving aside the droll confusion of laborer and capitalist, of value of labor-power and interest of capital, etc., the decrease of compound interest is supposed to be explained by lending capital at compound interest. This procedure of our Müller is characteristic of romanticism in all fields. It is made up of current prejudices, skimmed from the most superficial semblance of things. This false and trivial substance is then supposed to be 'uplifted' and rendered poetical by a mystifying mode of expression."

(Marx, 1909, p. 467)



Once again, von Bortkiewicz has the idea that the individual consumer <sup>16/</sup> is paying not the socially necessary labour time as expressed in the price of the commodity in question, but the incidental wages irrespective, as it were, of the conditions of the market and of the rest of commodities to which it belongs as a class. It confirms a flagrant denial of Ricardo, not to mention Marx, whom he claims to be interpreting algebraically.

Therefore, (20) fails to express a given sum of value manifested in the general equivalent known as money, vulgo price. At this stage, von Bortkiewicz merely confirms his helplessness. He can only explain prices by means of either foresight or hindsight. He has the idea that his imaginary and historical labour costs, presented as ciphers, determine the price of his own commodity. A one commodity economy, in which the one commodity not only cannot be compared to the rest of its kind. But, moreover, has not got anything to do with them. If p is to be "present price", he is turning as before, through "direct labour", a modern mechanic into a savage, and vice versa at a geometrical rate, in Price-calculation. As he slips endlessly backwards and forwards, he evades considering the determination of the price of a commodity, its expression in money of the socially necessary labour time embodied in it. On the contrary and amidst the utmost theoretical poverty, he has pretended to explain how a positive product of labour, in this case a commodity, can be turned out by private, historical and fortuitous indexes under the name of wages plus a compound markup: Price-calculation.

It is unfortunate that von Bortkiewicz forgot to explain how he arrived at "direct labour," and what is it in fact; what is "direct labour" and how does he reach for a start, such backward origins? This is in so far as no example is given, and aberrations come about when we try to work it out. For instance, one fundamental difference between a man and a beast is that the former constructs means of production,<sup>17/</sup> i.e. instruments of labour acting upon an object, which in developed commodity production take the form of constant capital.

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16 There could be no productive consumers since he is explicitly assuming at this stage, non-existence of constant capital.

17 "Although the use and creation of means of labour may be found crudely developed amongst certain species of animals, they are the special characteristic of human labour, and Franklin defines man as 'a tool-making animal'." (Marx, 1908, p. 140)

By excluding the latter, von Bortkiewicz is denying the mere possibility of man differentiating himself from, and opposing the rest of both organic and inorganic world. If Adam Smith confuses at times labour with cattle,<sup>18/</sup> von Bortkiewicz within his constraints, reduces systematically all labour into homonoid apes, at best.

The sole objective of this peculiar artifice called "direct labour" is to present all accumulated or past labour as if it were immediate labour, along with the labourer himself. In other words, he has supplanted constant and variable capital by "direct labour". Further, he replaces not only the labourer in action, but also labour materialized in objects and means of production -in a proportional fashion. "Direct labour" becomes a tout compris.

His labour process turns out to be a pathetic Dance Macabre performed by resurrected labourers indistinguishable from labourers proper. As far as the latter are concerned, it is beyond his capacity to differentiate labour in action from labour power, as if it was too cumbersome for his theoretical abilities.

In this way, labour becomes for von Bortkiewicz one single entity blurring:

- i) the capacity to labour -or labour power- sold to the capitalist by the worker himself;
- ii) the use of labour power which is labour itself, labour power in action;
- iii) the product of labour, that is where the labour process ends, results and disappears.

At the same time that such "revival" of dead labour is being carried out by our sombre demiurge, resuscitating constant capital into life, as it were, he might discover that profits are the "wages of capital."

In so far as the constant capital is replaced by "wages", the labourer would not confront capital as accumulated labour, neither would the latter dominate the labourer. There would be no contradiction at all between capital and labour; pure harmony. Constant capital, as presented by von Bortkiewicz is to be akin to labour, "or more exactly" is labour itself.

We can conclude that the organic composition of capital does not, in fact, exist for von Bortkiewicz. This is in so far as

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18 See Marx, 1915, p. 430.

constant capital could be expressed, according to him, in "direct labour", i.e. in units of "absolute" labour time.

In passing, we would note that as only "direct labour" exists for him, there is neither constant capital nor means of labour independent of immediate labour. Therefore, there would be no productive consumption nor any department producing means of production, i.e. constant capital in a process of capital re-production. The same holds, so far, for capitalist's consumption "goods", when considering Value-calculation. But let us not step ahead of von Bortkiewicz's train of exposition, and show, meanwhile, how he abolishes fixed and circulating constant capital by his own exertions.

Let us now examine in some detail if his assertions correspond to his wording.

"We shall now show that formula (20) does not cease to be valid when expenditures for raw materials and for the depreciation of equipment are added to the capitalist's outlay on wages. Expenditure on raw materials is represented by circulating constant capital, expenditure on depreciation by a part of fixed constant capital.

Here, too, as in value-calculation, and for the same reasons, we need only consider the case where constant capital -circulating as well as fixed- is in its turn exclusively the result  $\left[ \begin{array}{l} \text{the} \\ \text{exclusive product (ausschließliches Produkt)} \end{array} \right]$  of direct labour." (von Bortkiewicz, 1952, p. 18)

After we are resolutely assured how well formula (20) holds for both fixed and circulating constant capital, we will have to prove what he flatly asserts, i.e. that such is indeed the case. For what has first to be added at the same time cannot be added. For while constant capital has to be added to "direct labour", simultaneously it is "direct labour" itself. It looks like a contradiction in terms: to speak of constant capital or accumulated labour as simply immediate labour, or to use his words: "direct labour". After such a somersault is performed, our objector finds to his amazement "direct labour" as such yielding profits, hence (I9).

Von Bortkiewicz is wrong when he states above that "expenditures for raw materials and for the depreciation of equipment are added to the capitalist's outlay on wages." <sup>19/</sup> According to him, constant capital altogether is resurrected from dead labour into immediate wage labour, in order to "bud" out of itself compound

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19 Emphasis added.



profits; and not merely to add itself. According to his very assumptions, he is confusing addition with multiplication, and the latter with a power, as constant capital "begets" compound profits, as shown in (19).

In relation to circulating constant capital, the matter is settled swiftly. It is reduced to, or identified with "direct labour" and compound profits:

"So far as circulating constant capital is concerned, there is no need for mathematical proof to show that the productive participation of this kind of capital does not alter the structure of formula (20). All that happens here is that the production of a commodity goes through several independent stages, in which different capitalists are active consecutively. All of these, with the exception of the first, add mark-ups not only to their own outlays on wages, but to the wage-outlays of their predecessors. The period of time for which the mark-up is calculated, equals in each case the period of production in the corresponding stage. These periods of time are added up, so that in applying formula (20) to this case, one must so-to-speak date back appropriately some of the wage payments, namely those which the 'last' producer has not effected himself."  
(von Bortkiewicz, 1952, p. 18; emphasis added)

It looks as if von Bortkiewicz did not have the suspicion that in any economy there is not just only one commodity which makes itself be produced in consecutive stages by the capitalists. On the contrary, the capitalists produce commodities simultaneously, in spite of von Bortkiewicz's blinkers. As they engage in production, they constantly buy in order to sell -and vice versa. They do not wait consecutively in line for the arrival of von Bortkiewicz's sole commodity, or sets of sole commodities. A preposterous situation is supposed in (20) by this interpreter of Marx.

Besides, it is not sufficient to state that a mathematical proof is unnecessary to prove that (20) holds, in respect of circulating constant capital. As appeals to the self-evident are cornerstones of dogma, we reserve ourselves the right to question what he is so cheerfully evading to go into for the time being. Before we examine "All that happens here" within his own mathematical expressions, let us turn to fixed capital, in order to question his formulae as a whole.

#### a. Fixed capital used up: depreciation is appreciation

We have seen previously that according to von Bortkiewicz

every commodity yields a compound rate of profit throughout time in proportion to its "direct labour." The problem he faces in his dealings with fixed capital in particular, is how to apply his "progressive" formulae -for "nothing can stop" them- yielding further and further compound profits, and at the same time, further and further depreciating themselves until they have transferred or -to use our objector's parlance- "added" all their value. In other words, how to make a "piece" of fixed capital yield an ever higher compound profit, at the same time as its value is diminishing until it is extinguished.<sup>20/</sup>

Let us see how he accomplishes and exposes the depreciation of fixed constant capital.

"The case is not as straightforward with fixed constant capital. Let us assume that the piece of capital equipment (K) concerned, e.g. a machine or a building, embodies an amount of labour E. The outlay on wages occasioned by the production of K consequently equals  $\lambda E$ . To begin with, let this wage-outlay be conceived of as once for all outlay. Let  $\tau$  be the lapse of time between the moment at which the wage payment is made, and the moment at which K is put into the service of production. The price  $C_0$  of K at this moment is, on the basis of (19):

$$(22) \quad C_0 = (1+\rho)^\tau \lambda E \quad "$$

(von Bortkiewicz, 1952, p. 18)

Let us see how far von Bortkiewicz can take us.

"'Can the labourer,' he [the capitalist] asks, 'merely with his arms and legs, produce commodities out of nothing? Did I not supply him with the materials, by means of which, and in which alone, his labour could be embodied?'"

(Marx, 1918, p. 214)

Of different opinion is von Bortkiewicz. For him, all this litany is of no purpose. He argues -and gets obstinate- that wage labour can create with its unarmed arms a "piece of capital equipment (K) concerned, e.g. a machine or a building," all by itself. As if this was not enough, the capitalist of von Bortkiewicz's account, does not supply any object of labour in which wage labour can materialize its work. For von Bortkiewicz it is enough to say that the "piece of capital equipment (K) concerned" is wage labour in a geometric progression, and that the reciprocal of such geometric progression

<sup>20</sup> It is clear that the reserves for depreciation and what the capitalist does with them have not got anything to do with the process of "begetting," as expressed in (20) nor with the "revival" of dead labour he also claims in (20).

is wage labour.<sup>21/</sup> Let us continue.

"And as the greater part of society consists of such ne'er-do-weels, have I not rendered society incalculable service by my instruments of production, my cotton and my spindle, and not only society, but the labourer also, whom in addition I have provided with the necessities of life? And am I to be allowed nothing in return for all this service?"  
(Marx, 1918, p. 214)

All this eulogy is redundant for von Bortkiewicz, except for the odd circumstance that the only outlay the capitalist makes is, exclusively, wage labour. Raw materials are pre-empted by his extravagant "piece of capital equipment (K)", which, strangely enough, is to be produced without them. To speak of fixed capital necessary for the production of the "piece of capital equipment (K)" is, for von Bortkiewicz, to beg the question. For the simple reason that the piece of capital equipment (K) is the outcome solely of a single most primitive wage outlay at an early beginning, plus a lapse of time up to "the moment at which K is put into the service of production."

"Moreover, there is here no question of service. (1) A service is nothing more than the useful effect of a use-value, be it of a commodity, or be it of labour. (2) But here we are dealing with exchange-value. The capitalist paid to the labourer a value of  $\lambda E$ , and the labourer gave him back an exact equivalent in the value of  $\lambda E$ , added by him to the cotton  $\lambda$  or rather forming the piece of capital equipment (K) itself: he gave him value for value.

(1) 'Extol thyself, put on finery and adorn thyself...but whoever takes more or better than he gives, that is usury, and is not service, but wrong done to his neighbour, as when one steals and robs. All is not service and benefit to a neighbour that is called service and benefit. For an adulteress and adulter do one another great service and pleasure. A horseman does an incendiary a great service, by helping him to rob on the highway, and pillage land and houses. The papists do ours a great service in that they don't drown, burn, murder all of them, or let them all rot in prison; but let some live, and only drive them out, or take from them what they have. The devil himself does his servants inestimable service... To sum up, the world is full of great, excellent, and daily service and benefit.' (Martin Luther: An die Pfarrn, wider den Wucher zu predigen, Wittenberg, 1540.)

(2) In 'Critique of Pol. Ec.', p. 34, I make the following remark: on this point - 'It is not difficult to understand what 'service' the category 'service' must render to a class of economists like

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21 Perhaps, to use von Bortkiewicz's words, "For anyone to regard this procedure as an offence against logic, would only reveal his utter ignorance of algebra." (1952, p. 6)  
Meanwhile, his above example seems to be depleted even of common sense.



J.B. Say and F. Bastiat.'" (Marx, 1918, pp. 214, 215; E substitutes "3 shillings" in the original)

Let us continue, as we concede that (K), in spite of its ethereal parade of progressive indexes, was to represent a piece of capital equipment ready to further increase at a compound rate, its own price.

"Let furthermore  $C_1, C_2, C_3$  etc. be the price of K after the expiration of 1 year, of 2, 3 etc. years. After the expiration of a certain period of time, K is completely used up, and, if this period lasts  $w$  years,  $C_w$  must equal zero. Let also  $b_1, b_2, b_3 \dots b_w$  be the amounts which -in proportion to K's share in production- enter into the price of the output produced [should read: of the quantities of products (erzeugten Produktmengen)] with the aid of K in the 1st, 2nd, 3rd etc years; then according to the 'capitalistic calculation' the following relationships ensue: 27/

$$(23) \quad \left\{ \begin{array}{l} b_1 = \rho C_0 + C_0 - C_1 \\ b_2 = \rho C_1 + C_1 - C_2 \\ b_3 = \rho C_2 + C_2 - C_3 \\ \cdot \quad \cdot \quad \cdot \quad \cdot \quad \cdot \\ \cdot \quad \cdot \quad \cdot \quad \cdot \quad \cdot \\ b_w = \rho C_{w-1} + C_{w-1} - C_w \end{array} \right.$$

It can be proved that if the price components  $b_1, b_2$  etc. are reduced to formula (I9), i.e. if one makes

$$(24) \quad \left\{ \begin{array}{l} b_1 = (I+\rho)^{\tau+1} \lambda e_1 \\ b_2 = (I+\rho)^{\tau+2} \lambda e_2 \\ \cdot \quad \cdot \quad \cdot \quad \cdot \\ \cdot \quad \cdot \quad \cdot \quad \cdot \\ b_w = (I+\rho)^{\tau+w} \lambda e_w \end{array} \right.$$

one will get

$$(25) \quad e_1 + e_2 + e_3 + \dots + e_w = E$$

This would mean that K's contribution to production is calculated to have exactly the same significance as if the amount of labour E, which is embodied in K, had been expended directly on the production of this output.

27 For the sake of simplicity, we assume here yearly periods of production." (von Bortkiewicz, 1952, pp. 18, 19)

If von Bortkiewicz had been interpreting Marx, as he claims

he was, he could not have avoided noticing that

"We have seen that the means of production transfer value to the new product, so far only as during the labour-process they lose value in the shape of their old use-value. The maximum loss of value that they can suffer in the process, is plainly limited by the amount of the original value with which they came into process, or in other words, by the labour-time necessary for their production. Therefore the means of production can never add more value to the product than they themselves possess independently of the process in which they assist. However useful a given kind of raw material, or a machine, or other means of production may be, though it may cost £150, or, say, 500 days' labour, yet it cannot, under any circumstances, add to the value of the product more than £150. Its value is determined not by the labour-process into which it enters as a means of production, but by that out of which it has issued as a product. In the labour-process it only serves as a mere use-value, a thing with useful properties, and could not, therefore, transfer any value to the product, unless it possessed such value previously.(1)

(1) From this we may judge of the absurdity of J.B. Say, who pretends to account for surplus-value (Interest, Profit, Rent), by the 'services productifs' which the means of production, soil, instruments, and raw material, render in the labour-process by means of their use-values. Mr. Wm. Roscher who seldom loses any occasion of registering, in black and white, ingenious apologetic fancies, record the following specimen: -'J.B. Say (Traité, t.I. ch. 4) very truly remarks: the value produced by an oil mill, after deduction of all costs, is something new, something quite different from the labour by which the oil mill itself was erected.'(l.c., p. 82, note.) Very true, Mr. Professor! the oil produced by the oil mill is indeed something very different from the labour expended in constructing the mill! By value, Mr. Roscher understands such stuff as 'oil,' because 'oil' has value, notwithstanding that 'Nature' produces petroleum, though relatively 'in small quantities,' a fact to which he seems to refer in his further observation: 'It (Nature) produces scarcely any exchange value.' Mr. Roscher's 'Nature' and the exchange value it produces are rather like the foolish virgin who admitted indeed that she had had a child, but 'it was such a little one.' This savant sérieux in continuation remarks: 'Ricardo's school is in the habit of including capital as 'accumulated labour' under the head of labour. This is unskilful work (!), because, indeed(!) the possessor (!) of capital (!) does after all (!) do more than the mere (!) creating (?) and (??) preserving the same: that is (??) he abstains from the enjoyment of it, for which he requires, for example (!!!), interest' (l.c.) How very 'skilful' is this 'anatomico-physiological method' of political economy, which, 'indeed,' converts a mere desire 'after all' into a source of value." (Marx, 1918, p. 229)

While von Bortkiewicz never expresses the value of the product which the piece of capital equipment (K) contributed to create, it is impossible to assign any increase in value to the

means of production independently of the process of production in which they participate.

In the process of production -if it was to take place- the piece of fixed capital equipment -whether a machine or a building- can just transfer its value to the product. It cannot increase its own price, as von Bortkiewicz claims,<sup>22/</sup> which would mean to deprive the very result of the production process, viz., the product itself, of its expansion of value.

We confirm that von Bortkiewicz disguises a means of production representing fixed capital (K) as a product, so as to artificially claim that it "appreciates" itself. In fulfilling this quid pro quo, he identifies one with the other, overlooking that they are mutually exclusive. It is on the basis of this legerdemain, that he poses the "appreciation" of capital equipment simultaneous to its engrossed depreciation.

However, once the "piece of capital equipment (K)" starts functioning as a means of production, it cuts its umbilical cord, or rather, it has been cut, as it is a result of an earlier process of production, so as to be the condition of the one in which it is presumably functioning.

"Whenever therefore a product enters as a means of production into a new labour-process, it thereby loses its character of product, and becomes a mere factor in the process. A spinner treats spindles only as implements for spinning, and flax only as the material that he spins. Of course it is impossible to spin without material and spindles; and therefore the existence of these things as products, at the commencement of the spinning operation, must be presumed: but in the process itself, the fact that they are products of previous labour, is a matter of utter indifference; just as in the digestive process, it is of no importance whatever, that bread is the produce of the previous labour of the farmer, the miller, and the baker."  
(Marx, 1918, p. 203)

22 For instance, and on the basis of (23),

$$C_1 > C_0$$

if

$$b_1 < eC_0$$

Therefore

$$C_{i-1} > C_i \quad (i=1,2,\dots,w)$$

if

$$b_i < eC_i$$



Finally, von Bortkiewicz never explained to us, how the piece of capital equipment could multiply its own price outside the orbit of circulation, and how could it "appreciate" itself without any living labour acting upon it. As should be understood, the claimed increase in value of his piece of capital equipment is unfounded.

"Outside that sphere [of circulation] the commodity-possessor stands in relation only to his own commodity, which contains a given quantum of labour, estimated by fixed social laws. That labour is expressed in the value of the product, just as that value itself is expressed in money, say at the price of £10. But that labour cannot be represented both by the value of the product and by a value which is still greater, -by a price of £10 which is at the same time a price of £11; in other words, the value of the product cannot be represented by a greater value than itself. The producer may indeed create values by his labour, but he cannot create values which increase of their own accord, and themselves become creators of other values. It is possible, of course, to add a new value to a commodity by new labour, for instance, by turning leather into a pair of boots. The same material is now of greater value because it has absorbed more labour. The boots are of more value than the leather, but the value of the latter remains just what it was, [it has not expanded its value] and no surplus value is added in the making of the boots. It is thus impossible that outside the sphere of circulation, without coming into contact with other exchangers, the produce-exchanger can increase value, and communicate to it the property of begetting surplus-value. Yet, without the latter, there can be no transformation of money or commodities into capital."

(Marx, 1908, p. 126)

Let us continue with his exposition.

"(23) does in fact yield:

$$\begin{aligned}\frac{b_1}{I+q} &= C_0 - \frac{C_1}{I+q}, \\ \frac{b_2}{(I+q)^2} &= \frac{C_1}{I+q} - \frac{C_2}{(I+q)^2}, \\ \frac{b_3}{(I+q)^3} &= \frac{C_2}{(I+q)^2} - \frac{C_3}{(I+q)^3}, \\ &\vdots \\ \frac{b_{w-1}}{(I+q)^{w-1}} &= \frac{C_{w-2}}{(I+q)^{w-2}} - \frac{C_{w-1}}{(I+q)^{w-1}}, \\ \frac{b_w}{(I+q)^w} &= \frac{C_{w-1}}{(I+q)^{w-1}} - \frac{C_w}{(I+q)^w}.\end{aligned}$$

The sum of these  $w$  equations gives (since  $C_w = 0$ ):

$$(26) \quad C_o = \frac{b_1}{1+q} + \frac{b_2}{(1+q)^2} + \dots + \frac{b_w}{(1+q)^w}$$

and if one inserts in this formula for  $b_1, b_2$ , etc. the values indicated in (24), then:

$$C_o = (1+q)^T \lambda (e_1 + e_2 + \dots + e_w),$$

from which follows, on the basis of (22), the formula (25) which we set out to prove." (von Bortkiewicz, 1952, p. 19)

As we have observed above, (K) cannot serve both as means of production entering into the production process depreciating itself, viz., (23), and at the same time be disguised as still being under production, as if (K) was an object of production, viz., (24), engendering on its own and out of itself, a "new" value -or an increased price.

#### b. The decline of fixed and circulating constant capital

After having considered von Bortkiewicz's treatment of a fixed constant capital, as such, let us see how he incorporates it within the price of the product.

"That part of the price of a product which reflects the contribution of fixed capital to its production, can therefore be expressed according to formula (19), provided we suitably split up the amount of labour embodied in fixed capital." 23/

This is a tautology. To split suitably the amount of labour embodied as fixed capital, would be tantamount to reflecting the contribution of fixed capital to its production. Meanwhile, he avoids expressing how it actually "reflects" itself, "suitably split", within the price of a product.

So far he has avoided any specification as to how the contribution of fixed capital is to be represented by forming part of the price of the product. Immediately after, he opens a new paragraph, stating that

"This is, however, true only on the qualifying assumption -which we have so far stipulated- that the outlay on wages occasioned by the production of this particular piece of capital equipment, occurs at one single moment.

On the other hand, in the normal case, where the wage outlay is spread over several moments, the price of the piece of capital equipment, as well as that part of the price of the product which

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23 1952, p. 19.

is caused by the contribution of this particular capital to production, are both represented by a formula of the shape of (20)." (von Bortkiewicz, 1952, pp. 19, 20)

However, his qualifying assumption can apply to the price of the product to which a fixed capital has contributed. Or to the price of fixed capital itself. Apart from not proving what he assumes, his qualifying assumption avoids specification and it becomes vague. Hence (I9) is equivocal.

He also refers to the "normal case". While the price of a product is to represent exclusively the wage outlay plus a compound rate of profit on it, he concedes that such wage outlay is spread over several moments. For anybody endowed with common sense, it would be difficult to understand how such a state of affairs could constitute a normal case. Or even an exceptional case. In spite of spraying a wage outlay throughout time, only a wage outlay is deployed (i.e., no "capital equipment" employed), hence (20). It is inexplicable how a piece of capital equipment could have contributed with its price (or by itself) to the product (or to be reflected in its price). To be precise, such "normal case" constitutes an absurdity. And still, von Bortkiewicz has not told us how the price of a commodity in which fixed capital has contributed, is to be reflected as it is suitably split.<sup>24/</sup>

Further, it is absurd of von Bortkiewicz to speak of the price of the piece of capital equipment as contributing to the price of the product, while such piece is to be reduced to "direct labour". As "direct labour" precludes capital equipment -and hence its price form-, the price of the product cannot receive any transference, not to mention contribution, from the price of the piece of capital in the alleged production of such commodity.

Von Bortkiewicz continues next, claiming that

"The shape of formula (20) is not altered by the insertion, on the right-hand side, of fresh items  $\angle$ ?; actually, it should read: of the new terms of a sum (neue Summanden)  $\angle$  which accord with regard to their shape  $\angle$ ?  $\angle$  with the old items  $\angle$ ?; should read:

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24 As for that particular piece of capital equipment, von Bortkiewicz forgot again to say how that part of its price which "contributes" although it is not wholly transferable, is to be represented -let alone replaced. The reader would realize that in order to follow von Bortkiewicz as closely as possible, we are disregarding the result at which we arrived in examining his specific treatment of fixed capital, as such, in the last heading.



old terms of a sum  $\sum$  or with their sums  $\sum$ ? Formula (20) thus proves  $\sum$  to be the general  $\sum$  expression for the price of a commodity  $\sum$ . This is so independently of the circumstance whether, and to what degree the production of this commodity has required not only variable capital, but also the use of constant capital, either circulating or fixed." (1952, p. 20)

He forgot to alter the shape of formula (20). However, he gratifies us with "new items", their shapes; "old items", their sums, etc., without actually saying what is it he is talking about. The exposition from which his "deduction" is being drawn, proves his ability to deliver vacuous statements. As a result, he finds himself with a most "general" conclusion of a price of a commodity nowhere written in his article.

As if he was aware of the clarity he has thrown at us with the above evasion, he remembers that his argument boils down to formula (20). He warns the reader that formula (20), *viz.*, "direct labour," does not depend for its validity on variable capital. Nor on the use of constant capital, whether fixed or circulating. In a word, the use of capital for von Bortkiewicz is not only circumstantial, but it is actually of no use. He himself asserts that formula (20), i.e. the price of a commodity as a result of "direct labour" is so independent of constant and variable capital being used in whatever degree. Therefore -if we may assert the omitted consequent- formula (20) is thoroughly unrelated, or more exactly, alien to capital, whether variable or constant.

We simply confirm that constant capital, of which von Bortkiewicz only hints in passing, is depicted as an allegoric locution which appears partially and intermitently in his argument when he pretends to depart from his ineluctable "direct labour."

Strictly speaking, there was no need for us to stress that constant capital does not exist in von Bortkiewicz's blueprint. He has done this for us by reducing -deliberately- fixed constant capital (22) and circulating constant capital (for which he does not provide an independent identity) by simply supplanting them by (20), that is to say by "direct labour".

Von Bortkiewicz fails thoroughly in his attempt to make used up constant capital beget itself, as seen above. This is not-

withstanding that he confuses the fact that constant capital used up is consumed in the process of production, i.e. productive consumption is mixed up with the peculiar idea that constant capital is being produced "afresh" and not consumed in the process of production. But this quid pro quo is most obvious as he has told us already that both (20) and (19) refer to "its final buyer", i.e. to the imaginary consumer of his wares with such individual constraints that whatever is not "direct labour" or immediate workers is discarded. In his own words: "As we have in view the final price, i.e. the price at which the commodity will be sold to the consumer, we must regard the turnover period as starting with the moment when wages are paid, and ending at the moment of the sale of the commodity to its final buyer." <sup>25/</sup>

Let us note in passing that we have gone through some of von Bortkiewicz's manqué expressions with regard to vulgar economics, which is most fond of reducing the pleasant image that it has of the bourgeois mode of production to empty algebraic platitudes.

Finally, if there was any doubt left of constant capital being non-existent in von Bortkiewicz -in spite of what has been exposed-, he dispells them, as he reproves Marx for dragging on and clinging to the "strict distinction between variable and constant capital". Let us quote him in full.

"Marx appreciates the considerable progress which Ricardo has thereby brought about in the analysis of the formation of prices, and gives him credit for it as a 'great merit' <sup>29/</sup>. It is therefore all the more remarkable that Marx does not himself take this step too, but consistently clings to the distinction between two or three forms of capital. This distinction drags on through all the three volumes of Das Kapital and has obstructed rather than fostered Marx's purposes [should read: aim (Ziel)]<sup>7/</sup>. He clung to this distinction between variable and constant capital...

<sup>29</sup> Theorien über den Mehrwert, II, p. 18"  
(von Bortkiewicz, 1952, p. 20)

We corroborate that for von Bortkiewicz there is no "clinging" to any "strict distinction between variable and constant capital" <sup>26/</sup>. For him everything is "direct labour", i.e. immediate workers

<sup>25</sup> Von Bortkiewicz, 1952, pp. 16, 17.

<sup>26</sup> As for his explicitly precise reference to "two or three forms of capital" we note his predilection for using ciphers while evading any explanation.

devoid of means of labour. Destitute of means of production. No production of means of production. Hence, no constant capital.

## 2. Price is the measure of price

In the quest of solving the set of  $n$  "equations" from (20) corresponding to Price-calculation, von Bortkiewicz proceeds:

"The system of value-calculation yielded, for the  $n$  commodities in the market, an equivalent number of value-equations (see set (9)). Similarly,  $n$  price-equations of form (20) can be set forth in the system of price-calculation. The number of items on the right-hand side of each of these  $n$  equations may vary. Furthermore, the quantities  $a_1, a_2$ , etc. and  $t_1, t_2$  etc. are obviously different in each equation." (1952, p. 20) 27/

At this stage, von Bortkiewicz finds a stumbling block:

"On the other hand,  $\varrho$  and  $\lambda$  (like  $r$  and  $\ell$  formerly) do not vary from one equation to another. These two quantities are unknowns which join the  $n$  unknowns represented by the  $n$  prices ( $p_1, p_2 \dots p_n$ ) of the units of the commodities concerned." (von Bortkiewicz, 1952, p. 20)

Once more, he has advanced two more unknowns than "equations". For him, the "goods" pose ever two more questions than they could provide answers for. Both his system -this time Price-calculation-, and each of his "equations" are at first sight as enigmatic as they are inscrutable.

Before we find how he solves this conundrum, it is pertinent to note in passing, that he has taken an identity for an equation. Hence(20), claiming to reflect one single commodity. Moreover, he has made a quid pro quo between the commodity and its price.<sup>28/</sup> This is confirmed as he reduces the commodities, and the prices to such "units": "These two quantities  $\angle \varrho, \lambda \angle$  are unknowns which join the  $n$  unknowns represented by the  $n$  prices ( $p_1, p_2 \dots p_n$ ) of the units of the commodities concerned" (as quoted supra; emphasis added). We confirm that he is neither speaking of commodities

27 We will return to (20) later on, when we will examine this motley variety of  $a_i$  and  $t_i$  ( $i=1, 2, \dots n$ ), as they are "obviously different in each equation" (emphasis added), once von Bortkiewicz claims to handle different turnover periods.

28 Böhm-Bawerk repeats this admixture as he claims that "Every commodity that is the subject of exchange is at one and the same time a commodity and the price of what is received in exchange." (1959, p. 306; requoted in 1949, p. 135)



nor of their prices, but simply of empty indexes, i.e. "units"<sup>29/</sup>.

Let us return to his puzzling problematic of two extra unknowns.

Von Bortkiewicz adroitly solves these minor riddles which he has posed, defeating at a stroke, as it were, the winged creature of Thebes. Without losing composure, he cleverly utters:

"The missing two additional equations are found in the same way in which, earlier on, we found equations (I0) and (II). We thus get:

$$(27) \quad p_{\gamma} = I$$

and

$$(28) \quad \mu_1 p_1 + \mu_2 p_2 + \dots + \mu_n p_n = \lambda$$

Here too, we get a system of  $n+2$  equations with  $n+2$  unknowns." (1952, pp. 20, 21)

What we get here is a system of  $n$  "equations" with  $n+2$  unknowns, which in spite of identities (27) and (28) above, has no determined solution.

It is merely confirmed that there are ever more questions than answers in the riddle into which von Bortkiewicz has turned the prices of each of his "price-equations".

In the remainder of this section, let us analyse the first expression encountered -(27)- as closely as we can, in order to procede in sequence with further evidence of his.

He discovers that his  $n$ "equations" -this time in his Price-calculation- are the "price-equations". Then he picks up, at sheer random, one "good" out of his  $n$ "goods". Accordingly, he solemnly announces to the incredulity of the audience that such selected commodity, i.e. "equation"  $p_{\gamma}$  serves as a "measure of price," or as money in Price-calculation. In other words, the "price of money" is the "measure of price".

Therefore, for von Bortkiewicz, every commodity is the measure of its own price. He also discovers one commodity to measure the price of all the rest, whose "measure of price" is its price, i.e.  $p_{\gamma}$ .

The harmonization of this double absurdity is arrived at as

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<sup>29</sup> "Obviously, one can speak of an exchange ratio only in the sense of the relation of two individual and dissimilar goods to each other." (Böhm-Bawerk, 1959, p. 306)

follows: he goes "price on money" in hand to determine the price of the rest of commodities -which are already implicit in Price-calculation-, and puts underneath them, as a denominator, numeral one, i.e.  $p_\gamma$ . To his astonishment, the price of commodities is found by dividing them by numeral one; an historical achievement quite on its own. From now onwards, he has the temerity to state that the price of commodities -including  $p_\gamma$ - is found by dividing any commodity by one, including  $p_\gamma$ . Now we know. For this first kind of encounter, its proof lies in its assertion -and vice versa.

He confirms his credentials in vulgar economics, as he assumes the price of one commodity, i.e.  $p_\gamma$ , to determine the rest.<sup>30/</sup>

As he revealed that the price of any commodity is the "measure of its price," there would be as many prices as there are "goods". Therefore, for  $n$  commodities, there would be, at least,  $n(n) + 2$  unknowns. After his above revelation of (27) and (28), there would be only  $n(n)$  prices for each of the  $n$  commodities. In other words, for all consumers, there are as many as  $n(n)$  prices for every single commodity. Once again, in the name of proportionality, the theorem of happy mediocrity or "general (economic) equilibrium" is arrived at.

Hence, von Bortkiewicz cannot be recriminated for having supplied two more questions than answers. But, rather, for not having supplied all the answers for each question -according to his own assumptions. As we know, for one commodity he has, at least  $n(n)$  prices.<sup>31/</sup>

For von Bortkiewicz, every commodity is a special equivalent of itself and of the rest of commodities. Money is not the general equivalent, to which the rest of the commodities exclusively refer to express their value in its price form. Such general equivalent, vulgo money, is denied by von Bortkiewicz. At the same time, he turns the commodities into "monies" themselves.<sup>32/</sup>

<sup>30</sup> In Value-calculation, he has also presupposed the value of one commodity to determine the value of the rest. As can be seen, he is simply revamping what he has already told us under Value-calculation.

<sup>31</sup> To follow his line of reasoning, a single question concerning any problem has just as many answers as problems can be posed, multiplied by the aggregate of individuals -or "souls" in the universe in Walras' sensibly ethereal phraseology. A welfare of nonsense.

<sup>32</sup> "'Cursed gold!' cries a communist comically! (through the mouth of M. Proudhon). 'You might as well say: Cursed wheat, cursed vines, cursed sheep! -for just like gold and silver, every commercial value

In each of von Bortkiewicz's frivolous kingdoms, every commodity is money, and money is every commodity. Its price would be realized without exchange, while competition is banished. Direct exchangeability of commodities would be a natural attribute of the commodities themselves, for our enlightened free-trader bagman. In itself, price is for him compulsory exchange in equilibrium.

But his kingdom is not deserted, as we know. It is also composed of consumers, the very demiurges of their "goods". And if he fetishizes the commodities, he can also do the same with them. As we know from his declaration: "nothing can stop one". Hence, every consumer would be an uncrowned king. There would be as many sovereigns as there are consumers. Therefore, we observe the sovereignty of the consumer, with freedom of choice to price the universe of "goods" according to their own unalienable and free individual standards, on the basis of their "free-will".

But how are they -the consumers- to reconcile their individual appreciations? How is harmony to prevail? In a most agreeable mode. After every consumer has fulfilled his appraisalment role task, in isolation and somehow possessing perfect sources of information, he proceeds to make it "all ethical". The market is turned into a parliament -a veritable parliament of sovereign consumers. It follows -and it is strongly advised- that each consumer should be a dexterous deputy in such "ethical" dealings, so as to look after his individual interests. In so far as this process is allegedly normative, perfect competition ought to rule. Hence, no standing compulsory force -if at all, should burst into such proceedings. For in such a "House" and in such a kingdom, all individuals or groups of individuals are, for sure, formally equal.

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must attain its strict and exact determination.'

The idea of making sheep and vines attain the status of money is not new. In France, it belongs to the age of Louis XIV. At that period, money having begun to establish its omnipotence, the depreciation of all other commodities was being complained of, and the time when 'every commercial value' might attain its strict and exact determination, the status of money, was being eagerly invoked. Even in the writings of Boisguillebert, one of the oldest of French economists, we find:

'Money then, by the arrival of innumerable competitors in the form of commodities themselves, re-established in their true values, will be thrust back again within its natural limits.' (Economistes financiers du dix-huitième siècle, Daire edition, p. 422)

One sees that the first illusions of the bourgeoisie are also their last." (Marx, 1978, p. 82)



As we know, harmony ought to rule and occasional parley constitutes the very limit of conflict.<sup>33/</sup>

### 3. The price of commodities is regulated by wages

In the last section we have seen how von Bortkiewicz succeeds in dealing with a "price equation" of three unknowns, corresponding to every sole "good." By means of

$$(27) \quad p_{\gamma} = I$$

price is to be the "measure of price."

In this section, we will turn to the encounter of the second kind he has presented us with in "equation"

$$(28) \quad \mu_1 p_1 + \mu_2 p_2 + \dots + \mu_n p_n = \lambda$$

With self-assured brevity, he claims in relation to (27) and to (28):

"Here too, we get a system of  $n+2$  equations with  $n+2$  unknowns. These equations are solved by first inserting in equation (28) for  $p_1, p_2$  etc. the terms standing on the right-hand side of the corresponding price-equations." (von Bortkiewicz, 1952, p. 21)

Therefore, as he hurries to make them appear solved in his fleeting remark, he merely forgets to state what is the content and origin of expression (28).

As if something could stop him, he does not utter a word about it. Perchance this empty identity (28) is not as straightforward as expected; we are left with no choice but to find alternative means to make out what is expressed in it.

For a start, (28) looks like an euphemism of identity (II), within the principle not of Price-calculation, but of Value-calculation; which has already been considered in its place.<sup>34/</sup>

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<sup>33</sup> Logically, Sancho would have never dreamed of having it so good, as he is to become the ruler -for life- of Baratania. Besides, and with all his manifest appetite, he would have gone astray learning that few centuries later he would have encountered, on the basis of his natural right, the eternal ruler of the pleasant Insula.

<sup>34</sup> For the sake of exposition, let us repeat it again:  
"[In Value-calculation] The real wage is formed by certain quantities of some of the  $n$  goods. One can, however, equally well say that the real wage is constituted by certain quantities ( $\mu_1, \mu_2, \mu_3 \dots \mu_n$ ) of all the  $n$  goods, where some of these

Why is it that "The real wage" is given quite an explicit consideration in Value-calculation, while not a word is written in Price-calculation for the analogous (28)? Simply because this serious and subtle thinker has made a parade of "The real wage" both in his principle of Value-calculation and in his second principle of Price-calculation.

Now we know. "The real wage" would be -on appearance- a set of doubly identified n "goods"; as it suits to his two principles. Meanwhile, he honours himself as a most peculiar book-keeper, as he embraces the art of double accounting.

We have still not advanced a step in finding out what is it (28). However, von Bortkiewicz provides -apart from concealed duplicity- no further explanation.

Let us turn to look for the starting point of "The real wage" in Price-calculation. Hence (28).

Disregarding for the time being his double accounting, in relation to Price-calculation, von Bortkiewicz is out of step with his alleged explanations. Expressions (27) and (28) do not correspond to a system of "n+2 equations".

Let us elaborate.

The entirety <sup>35/</sup> of "n goods" would be expressed as follows:

$$(20): \quad \sum_{i=1}^n p_i = \sum_{i=1}^n \sum_{j=1}^m (I+e)^{t_{ij}} a_{ij}$$

"The real wage is formed by certain quantities of some of the n goods" and also "is constituted by certain quantities of ( $\mu_1, \mu_2, \mu_3 \dots \mu_n$ ) of all the n goods"<sup>36/</sup>. Therefore (28) turns out into:

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quantities equal zero. The value of this complex of goods known as the real wage, is clearly identical with the money wage. We therefore get:

$$(II) \quad \mu_1^w + \mu_2^w + \dots + \mu_n^w = \ell$$

We thus reach a system of n+2 equations with just as many unknowns." (von Bortkiewicz, 1952, p. 15)

35 We bear in mind von Bortkiewicz's confusion of each one of his "goods" with the whole of them.

36 Von Bortkiewicz, 1952, p. 15.

$$(28)' \quad \mu_1 p_1 + \mu_2 p_2 + \dots + \mu_n p_n = \sum_{i=1}^n \sum_{j=1}^m \lambda a_{ij}$$

Leaving aside his money wage for two systems, von Bortkiewicz confuses "The real wage" for one labourer with the wages for the totality of labourers. Within his Utopian equalitarian constraints, all individuals are identical and hence, should earn exactly the same "real wage". At the same time, (28)' refers to one sole wage and presumably to a sole wage labourer. In his economic fantasy, there would be only one labourer. Even more; only one labourer under hire. That is to say one wage labourer receiving the wage rate, moreover unknown.

The supplement of (28)' to (20) is

$$(28)' \text{ bis} \quad \nu_1 p_1 + \nu_2 p_2 + \dots + \nu_n p_n = \sum_{i=1}^n \sum_{j=1}^m \lambda a_{ij} \left[ (I+q)^{t_{ij}} - I \right]$$

whereby the "real capitalist's profit" -constituted by certain quantities  $\nu_i$  of all  $n$  "goods"- is supplementary to the "real wage". Together, these make up the price of "all the  $n$  goods".

In other words, to prove that profits exist, von Bortkiewicz has turned society into a one "person-society" (i.e., of one sole labourer), where the "real wage is identical with the money wage".<sup>37/</sup> As a corollary, profit is the surplus that "all labour must leave", while von Bortkiewicz finds himself a bedfellow of Proudhon <sup>38/</sup>.

37 Von Bortkiewicz, 1952, p. 15.

38 "An axiom generally admitted by economists is that all labour must leave a surplus. In my opinion this proposition is universally and absolutely true: it is the corollary of the law of proportion, which may be regarded as the summary of the whole of economic science. But, if the economists will permit me to say so, the principle that all labour must leave a surplus is meaningless according to their theory, and is not susceptible of any demonstration." (Proudhon) To prove that all labour must leave a surplus, M. Proudhon personifies society; he turns it into a person-society - a society which is not by any means a society of persons, since it has its laws apart, which have nothing in common with the persons of which society is composed, and its 'own intelligence,' which is not the intelligence of common men, but the intelligence devoid of common sense. M. Proudhon reproaches the economists with not having understood the personality of this collective being." (Marx, 1978, pp. 83, 84)



Therefore, price = "real wage" + profit, expressed in (20)'; (28)' is the "real wage" -identical to the "money wage"- or worker's "goods". Furthermore, (28)'bis is the capitalist's "goods" -identical to the profit or "surplus left by labour". Hence,

(28) wage labour "goods" = "real wage";

(28)'bis capitalist's "goods" = profit

This simply follows from (20)' which states that prices are both, composed of and resolved into wage and profit, i.e. (28) and (28)'bis, respectively. So that

(20) price = "real wage" + profit;

"real wage" = price - profit hence (28)';

profit = price - "real wage", hence (28)'bis.

This time, in repeating his circular reasoning, he no longer throws a diatribe against whoever opposes his brand of logics or algebra, as he did in Value-calculation. While in either case (within the principle of Value-calculation and within the principle of Price-calculation) he merely traces the same path ad infinitum; this second time his gracelessness is accompanied by humility, just as if he was aware of Proudhon's strictures <sup>39/</sup>.

Von Bortkiewicz's two principles merely confirm the sterility of what he calls "The real wage," which despite being an identity, it is to be encountered in both systems of calculation.

We have seen how in his endless chain of platitudes, von

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39 "After his lengthy digressions on railways, on Prometheus, and on the new society to be reconstituted on 'constituted value,' M. Proudhon collects himself; emotion overpowers him and he cries in fatherly tones:

'I beseech the economists to question themselves for one moment, in the silence of their hearts -far from the prejudices that trouble them and regardless of the employment they are engaged in or hope to obtain, of the interests they subserve, or the approbation to which they aspire, of the honours which nurse their vanity- let them say whether before this day the principle that all labour must leave a surplus appeared to them with this chain of premises and consequences that we have revealed.'" (Marx, 1978, p. 95)

In turn, this is after von Bortkiewicz's dilation on "direct labour", i.e. Prometheus; on the diverse speed of his turnovers, as time -moreover "exogenous"- becomes profit, in his train of thought. And, as we know, "absolute value" happens to be "constituted value."

Bortkiewicz has told us that "The real wage" is the "money wage"; is the "wage rate" and also the "goods" that the worker consumes. However, all this fatuity depicting "The real wage" acquires a new significance altogether, as von Bortkiewicz, in a helpless strabismus upholds it in his two principles, i.e. "The real wage" in Value-calculation and "The real wage" in Price-calculation. A real vicious circle duly exercised twice.

Finally, it is not difficult to confirm the self-destructive character of von Bortkiewicz's tautology. Since there is no constant capital, the price of the commodity product is to be represented by wages and profits, composing the net product. But in actual fact, there would be no net product, as it resolves itself in wages and profits. To use Ricardo's earlier remark, "Take a whole from a whole and nothing remains." (1951a, p. 421 n.)

#### 4. Wages are a direct and not a indirect determinant of prices

In an abundance of revelations, von Bortkiewicz promises further disclosures from his "price-equations". He has encountered -"finally"- a new kind of solution.

"The remaining unknowns ( $p_1, p_2$ , etc.) finally, can be determined without further ado from the corresponding price-equations. Incidentally, instead of calculating  $\lambda$ , one could form the quotients  $\frac{p_1}{p_\gamma}, \frac{p_2}{p_\gamma}$  etc., whereby  $\lambda$  would be eliminated. Since

$p_\gamma = 1$ , one could get for  $p_1, p_2$  etc. fractions, of which the numerators would contain -apart from  $q$ - the amounts of labour and the turnover periods appertaining to the commodity concerned, whilst the denominators would contain -apart from  $q$ - the amounts of labour and the turnover periods appertaining to the commodity which serves as a measure of price."  
(von Bortkiewicz, 1952, pp. 21, 22)

Here, von Bortkiewicz is asserting that in forming the quotients

$\frac{p_1}{p_\gamma}, \frac{p_2}{p_\gamma}, \dots, \frac{p_\gamma}{p_\gamma}, \dots, \frac{p_n}{p_\gamma}$ , those very quotients would be fractions;

the numerator containing amounts of labour  $a_i$ , the rate of profit and the turnover period  $t_i$ . As he forgot even to express them as a formula, let us do it for him:

$$(20)\text{bis} \quad \frac{p_i}{p_\gamma} = \frac{\sum_{j=1}^m (1+q)^{t_{ij}} a_{ij}}{\sum_{j=1}^m (1+q)^{t_{\gamma j}} a_{\gamma j}} \quad (i = 1, 2, \dots, \gamma, \dots, n)$$

whereby  $\lambda$  -the wage rate- has been eliminated. Also

$$(27) \quad p_\gamma = 1$$

is claimed to be the price of the commodity serving as a "measure of price" <sup>40</sup>. And as might be expected,

$$(21) \quad a_1 + a_2 + \dots + a_m = A$$

As can be seen, in (20)bis,  $\lambda$  has been explicitly eliminated, whereby he needs not calculate it. The expression in which  $\lambda$  has been eliminated in von Bortkiewicz's argument constitutes one version of each of his "price-equations".

Alternatively, he has explicitly presented us before with formula

$$(20) \quad p = (1+q)^{t_1 \lambda} a_1 + (1+q)^{t_2 \lambda} a_2 + \dots + (1+q)^{t_m \lambda} a_m$$

followed by

$$(21) \quad a_1 + a_2 + \dots + a_m = A$$

for any "price-equation".

Let us now refer in particular to the two versions of his "price-equations". Namely (20) itself and (20)bis.

First, in order to reach (20), he has asked us before to "Let  $a_1 \lambda$ ,  $a_2 \lambda$ ,  $a_3 \lambda$  . . .  $a_m \lambda$  be the amounts paid out in wages at each of these moments  $\int$  of time  $\int$ ." <sup>41</sup> Hence, in (20) it is ostensible

<sup>40</sup> It appears as if Walras was satisfied by going round in circles once while determining the price of the commodities in terms of any one, i.e. the numéraire. Meanwhile, von Bortkiewicz has duly repeated twice this circumlocution. Once in Price-calculation, once in Value-calculation.

<sup>41</sup> Von Bortkiewicz, 1952, p. 17.



that wages are a direct determinant of the "price-equations" of the "price-equations" of commodities, affecting them directly; certainly in a directly proportional relation.

Second, and in agreement with his double principles, he claims that

"We have seen (above p. 21) [supra formula (20)bis] that the price of a commodity can be represented by a mathematical expression [viz., (20)bis] from which  $\lambda$  (the wage rate) has been eliminated.

We are thus entitled to say with Ricardo that wages [also in the System of Price-calculation!]; (auch im System der Preis-rechnung!) are not a direct determinant of the exchange relationships [meaning price-equations] of commodities, but that they only influence these relationships indirectly, to the extent to which the level of wages [meaning the wage rate] bears a certain relation [?] to the level of the rate of profit ( $\rho$ )."

(von Bortkiewicz, 1952, p. 25; emphasis added)

Leaving Ricardo aside, <sup>42/</sup> von Bortkiewicz is claiming in (20)bis that wages are not a direct determinant of his "price-equations", while they have an indirect influence which he abstains from specifying, as if it were a reciprocal relation with the rate of profit; both for  $p_i$  and for  $p_\gamma$  within a quotient.

As a result, for von Bortkiewicz, the price of a commodity is affected directly by the wage rate, on the basis of (20). Nevertheless, the price of a commodity is not affected directly by the wage rate, according to (20)bis. Once again, he upholds two contradictory consequences out of the ambiguity by which he abides.

<sup>42</sup> Von Bortkiewicz is not "entitled to say, with Ricardo, that wages" etc., or that "the level of wages bears", etc. All that von Bortkiewicz displays is that there is a sole wage rate and hence a sole labourer. He is helpless -in contradistinction to Ricardo- to have understood even how various skills of different labourers are equalized. Hence, he has not got ground to speak of wages, moreover in plural. However, he points out -infra- that in Ricardo, such a relation is uncertain:

"With regard to Ricardo, we must not, however, overlook that one cannot always give casual interpretation to the antagonisms between  $\rho$  and  $U$  which really does prevail with the above-mentioned qualification [: in the first case, no fall in the productivity of labour occurs at any stage of production, and that, in the second case, no increase takes place at any stage of production]. For Ricardo very often talks as if a change in  $\rho$  could not be caused otherwise than by a change in  $U$ ... The truth is rather that although a change in  $U$  is always accompanied by a change in  $\rho$  <sup>105/</sup>, this does not imply that all changes must start with the first of these two magnitudes.

<sup>105</sup> I disregard here the condition discussed above, which qualifies the validity of this statement." (von Bortkiewicz, 1952, p. 49)

## 5. A rate of profit proves unyielding

We will consider how von Bortkiewicz implicitly determines the rate of profit in a rigorous manner.

"Equation (28)  $\left[ \frac{43}{44} \right]$  is thus transformed into an equation of form (20)  $\left[ \frac{44}{45} \right]$ , which shall be written as follows:

$$(29) \quad (I+q)^{\tau_1} \lambda u_1 + (I+q)^{\tau_2} \lambda u_2 + \dots + (I+q)^{\tau_s} \lambda u_s = \lambda$$

$\tau_1, \tau_2$  etc. are here the turnover periods, and  $u_1, u_2$  etc. the amounts of labour required to produce the commodity-complex which forms the real wage-rate. By eliminating  $\lambda$  on both sides of the last equation, we find:

$$(30) \quad (I+q)^{\tau_1} u_1 + (I+q)^{\tau_2} u_2 + \dots + (I+q)^{\tau_s} u_s = I$$

This equation corresponds to equation (I4)  $\left[ \frac{45}{46} \right]$ . The following relationship obviously hold good:

$$(31) \quad u_1 + u_2 + \dots + u_s = U$$

(von Bortkiewicz, 1952, p. 21)

Hence, (30) can be rewritten as follows:

$$(30)' \quad I = \sum_{i=1}^s (I+q)^{\tau_i} u_i$$

or as

$$I = \sum_{i=1}^s u_i + \sum_{i=1}^s u_i \left[ (I+q)^{\tau_i} - I \right]$$

From (30)' we learn that the rate of profit for the aggregate of commodities is a compound markup over and above the rate of wage paid at different periods of time.

Obviously, (30)' can be further rewritten as follows:

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$$43 \quad (28) \quad \mu_1 p_1 + \mu_2 p_2 + \dots + \mu_n p_n = \lambda$$

$$44 \quad (20) \quad p = (I+q)^{t_1} \lambda a_1 + (I+q)^{t_2} \lambda a_2 + \dots + (I+q)^{t_m} \lambda a_m$$

$$45 \quad (I4) \quad (I+r)U = I$$

$$I - \sum_{i=1}^s u_i = \sum_{i=1}^s u_i \left[ (I+\varrho)^{r_i} - I \right]$$

Therefore, the rate of profit as a whole would be expressed out of von Bortkiewicz's formula as a compound markdown under and below the price of the "commodity-complex" in its entirety.

Now we know. The rate of profit is a compound markup over the wage rate, together equal to the price of the commodity. Moreover, the rate of profit is a compound markdown under such price, of the commodity equal to the wage rate.

As can be seen, von Bortkiewicz has not exposed only a simple rate of profit which is either a markup or a markdown, but a progressive one throughout time. It is not put forward as a ratio between the mass of surplus value, say in sterling pounds and the total advanced capital. However, it is presented as a compound markup or markdown, over or under the prices of commodities.

According to von Bortkiewicz, aggregate "profit" would be equal to the price of the whole of a commodity complex minus a commodity complex which forms the "real wage":

$$\sum_{i=1}^n \sum_{j=1}^m \lambda a_{ij} \left[ (I+\varrho)^{t_{ij}} - I \right] = \sum_{i=1}^n p_i - \sum_{i=1}^n \sum_{j=1}^m \lambda a_{ij}$$

on the basis of (18) and (20).

Assuming that the total capital outlay is "direct labour" duly accounted, the rate of profit would be expressed as follows:

$$\frac{\sum_{i=1}^n \sum_{j=1}^m \lambda a_{ij} \left[ (I+\varrho)^{t_{ij}} - I \right]}{\sum_{i=1}^n \sum_{j=1}^m \lambda a_{ij}}$$

According to the implicit logic of von Bortkiewicz's argument, however, it is impossible to express the rate of profit as a relation between the mass of profits and the outlay of total capital. In so far



as profit is exclusively depicted as a rate, the above expression shows that it cannot be expressed on its own. Once value and its expression in money, vulgo price is reduced to an index, profit can just then be expressed as an aliquot part of total value, moreover presupposed.

Before we proceed, let us bear in mind that the rate of profit has no source in von Bortkiewicz's exposition. What was to be redistributed, viz., the mass of surplus value, not only is non-existent, but has been supplanted by a fading surplus rate. While von Bortkiewicz has advanced an assumed rate of profit, it is as if he was unable -or incapable- to reduce it to any law, as  $\rho$  is confined in an arbitrary and unfounded progression.

In order to anticipate objections, even

"If they [von Bortkiewicz et al. were to] assert that they [-profits-] are settled by the competition between the capitalists, they say nothing. That competition is sure to equalize the different rates of profit in different trades, or reduce them to one average level, but it can never determine the level itself, or the general rate of profit."  
(Marx, 1973, pp. 29, 30)

Therefore, it is apt to bear in mind that it is of no avail to resort to supply and demand in an attempt to explain the rate of profit itself, which von Bortkiewicz designates as  $\rho$ .

However, let us see what  $\rho$  comprises.

From  $p_i$  ( $i=1,2 \dots n$ ), let us take any of his commodities.

Say, commodity 2001. On the basis of (20),

$$p_{2001} = (I+\rho)^{t_1} \lambda a_1 + (I+\rho)^{t_2} \lambda a_2 + \dots + (I+\rho)^{t_m} \lambda a_m$$

and from (2I)

$$a_1 + a_2 + \dots + a_m = A_{2001}$$

While  $A_{2001}$  refers to the amount of labour employed in the production of one unit of commodity 2001, distributed over the turnover periods  $t_1, t_2$ , etc., the expression  $p_{2001}$  can be rewritten as follows:

$$(20)i \quad p_{2001} = \sum_{i=1}^m (I+\rho)^{t_i} \lambda a_i$$

It is clear that a "good"  $p_{2001}$ , or its equivalent, could pay the wages for

$$\sum_{i=1}^m a_i \quad (i=1, 2, \dots m)$$

days of labour concerned.

Let us further assume that as 1 unit of commodity, say  $p_{666}$  is given in exchange for 1 unit of  $p_{2001}$ , the outlay on wages throughout time has been identical in both cases.<sup>46/</sup>

Von Bortkiewicz is also telling us that on the basis of some mysterious privilege, both holders of commodities  $p_{2001}$  and  $p_{666}$  exchange them among each other at an undeterminable and compound markup over and above the wages outlaid throughout time. But if the "capitalist gain or profit" <sup>47/</sup> is to be obtained by both holders of  $p_{2001}$  and  $p_{666}$  by raising nominally the price to each other over and above the wage outlays throughout time in compound fashion, as both do the same and in identical proportion, the result is, in the end, as if they would have exchanged both commodities for what their price actually is, without the nominal surcharge. The detour prescribed by von Bortkiewicz would have required both holders of  $p_{2001}$  and  $p_{666}$  to employ a surplus means of exchange to the amount of

$$\sum_{i=1}^m (I+\rho)^{t_i} \lambda a_i - \sum_{i=1}^m \lambda a_i = \sum_{i=1}^m \lambda a_i [(I+\rho)^{t_i} - I]$$

when a means of circulation of

$$\sum_{i=1}^m \lambda a_i$$

<sup>46</sup> Hence, "the total wages  $\lambda a$  are not paid out at one moment, but at  $m$  different moments which precede the moment of completion or of sale of the product by  $t_1, t_2, t_3 \dots t_m$  units of time (i.e. years or fractions of years). Let  $a_1 \lambda, a_2 \lambda, a_3 \lambda \dots a_m \lambda$  be the amounts paid out in wages at each of these moments." (1952, p. 17)

<sup>47</sup> 1952, p. 17.

would have done. Far from obtaining any gain by such cumbersome nominal and assumed compound markup, a considerable part of their working capital would have to remain idle in order for them to engage in such an sterile detour.

Therefore, while one unit of commodity

$$p_{2001} = \sum_{i=1}^m (I+q)^{t_i} \lambda a_i$$

is given in exchange for one unit of commodity

$$p_{666} = \sum_{i=1}^m (I+q)^{t_i} \lambda a_i$$

in actual fact each holder would be exchanging commodities whose price would not vary by means of a nominal surcharge to the amount of

$$\sum_{i=1}^m \lambda a_i \left[ (I+q)^{t_i} - I \right]$$

in the case of  $p_{2001}$ , and likewise in the case of  $p_{666}$ . Von Bortkiewicz's procedure of advancing profit exclusively as a rate, simply confirms that he has precluded profit as a mass, while he has supplanted it exclusively by an index or pure percentage devoid of determination. Once the mass of profit is cast aside, it would not be any more a part of the costs of production in the form of price of any commodity, and its relation with capital outlay, viz., the rate of profit, would be baseless.

Generalizing, for the aggregate prices, as before,

$$\sum_{i=1}^n p_i = \sum_{i=1}^n \sum_{j=1}^m (I+q)^{t_{ij}} \lambda a_{ij}$$

The above commodities do not comprise any mass of profits whatsoever. What von Bortkiewicz has done is to mark up, at a compound



rate, the wages paid throughout time accruing to each commodity. While their price has been artificially inflated by

$$\sum_{i=1}^n \sum_{j=1}^m (I+\varrho)^{t_{ij}} \lambda_{a_{ij}} - \sum_{i=1}^n \sum_{j=1}^m \lambda_{a_{ij}} = \sum_{i=1}^n \sum_{j=1}^m \lambda_{a_{ij}} [(I+\varrho)^{t_{ij}} - I]$$

no mass of profits would have been created through this artifice, as all the elements in which price is represented are to be aliquot parts -or indexes. If the mass of profits is non-existent, the rate of profit would be devoid of determination, let alone being meaningless.

In Value-calculation, we found that the surplus value faded as it was a simple markup devoid of content; a pure index. Such ethereality already bears the non-existence of interest and of capital itself, as it -capital-would be deprived even of its basis of simple reproduction:

"If no surplus-value were produced, then of course together with surplus-value the part of it which is called interest would also cease to exist, and so would the part which is called rent; the anticipation of surplus value would likewise come to an end, in other words, it would no longer constitute a part of the costs of production in the shape of the price of commodities. The existing value entering into the production process would not emerge from it as capital at all, and accordingly could not enter into the reproduction process as capital, nor be lent out as capital."

(Marx, 1971, pp. 513, 514)

Let us apply the above findings to von Bortkiewicz's alternative nomenclature. He has told us that

$$(4) \quad P = \alpha c + v + \varrho(c+v)$$

But here,  $\alpha c$  is to be absent, as we were told before by him. Thus (4) becomes

$$(4)' \quad P = v + \varrho(c+v)$$

As (20)' is substituted in (4)',

$$\sum_{i=1}^n \sum_{j=1}^m (I+\varrho)^{t_{ij}} \lambda_{a_{ij}} = v + \varrho(c+v)$$

However, whether profit is expressed as  $\varrho(c+v)$ , or as

$$\sum_{i=1}^n \sum_{j=1}^m \lambda a_{ij} \left[ (I+\varrho)^{t_{ij}} - I \right]$$

such expressions would be misleading, as in von Bortkiewicz the mass of profit is non-existent. In consequence, the rate of profit would be devoid of basis.

Thus, von Bortkiewicz has flagrantly failed to explain the nature and magnitude of profit. Moreover, he has been taking advantage of the candour of credulous readers by operating with vanishing quantities. In spite of the noise, his system of flammenwerfer proves innocuous.

## 6. Two standards for accounting prices

On the basis of "equation"

$$(20) \quad p = (I+\varrho)^{t_1} \lambda a_1 + (I+\varrho)^{t_2} \lambda a_2 + \dots + (I+\varrho)^{t_m} \lambda a_m$$

and considering that all "goods" would share the same ascribed formula, we have

$$(20)' \quad \sum_{i=1}^n p_i = \sum_{i=1}^n \sum_{j=1}^m (I+\varrho)^{t_{ij}} \lambda a_{ij}$$

Obviously, this set of  $p_i$  "equations", or any "equation" of this set, has no determinate solution, to which attention was drawn from the inception of von Bortkiewicz's formulae.

Expression (20)' states that the sum of prices of all commodities equals the wage rate paid at different periods of time plus its compound markup. Nevertheless, and as von Bortkiewicz considers -all on his own- that  $\lambda$  and  $\varrho$  are to be treated as unknowns (perhaps to reinforce the mystery of his system), he has slipped in two standards for accounting prices, i.e.

$$(27) \quad p_{\gamma} = I$$

and

$$(28) \quad \mu_1 p_1 + \mu_2 p_2 + \dots + \mu_n p_n = \lambda$$

One standard of price of account occurs in  $p$ , which is to be the commodity serving as a "measure of price". Hence (27), identical to the amount of labour employed in the production of the commodity under consideration. We must note that while (27) refers to one commodity, von Bortkiewicz confuses it with the aggregate expression for the price of the "commodity-complex" as a whole, viz.,

$$(30) \quad (I+q)^{\tau_1} u_1 + (I+q)^{\tau_2} u_2 + \dots + (I+q)^{\tau_s} u_s = I$$

Further, (28) would be a second standard of accounting prices, identical to the "complex of goods" identified as the "real wage", referred to as wage labour. Also, von Bortkiewicz does not differentiate between the "complex of goods", -which forms the aggregate "real wage-rate" and a wage rate, viz.,

"Equation (28) is thus transformed into an equation of the form (20), which shall be written as follows:

$$(29) \quad (I+q)^{\tau_1 \lambda} u_1 + (I+q)^{\tau_2 \lambda} u_2 + \dots + (I+q)^{\tau_s \lambda} u_s = \lambda$$

$\tau_1, \tau_2$  etc. are here the turnover periods, and  $u_1, u_2$  etc. the amounts of  $\int$  wage  $\int$  labour required to produce the commodity-complex which forms the real wage-rate."  
(von Bortkiewicz, 1952, p. 21)

We have seen that apart from two standards of account for prices, he confuses individual and aggregate expressions in depicting his "goods."

## 7. A preposterous measure of value and of price

At this stage, von Bortkiewicz is not satisfied with bearing double standards for accounting prices. He is about to discover the coincidental circumstances under which Price- and Value-calculation fuse; and subsequently provides a general case under which they do not correspond.

"If the turnover period were constant and equal to 1 year, then (30)  $\int_{48}$  would merge into (I4)  $\int_{49}$ , and  $q$  would

$$48 \quad (30) \quad (I+q)^{\tau_1} u_1 + (I+q)^{\tau_2} u_2 + \dots + (I+q)^{\tau_s} u_s = I$$

$$49 \quad (I4) \quad (I+r)U = I$$

equal  $r$ . In this special case, there would be no difference at all between value-calculation and price-calculation.

In the general case, however,  $q$  may be either smaller or larger than  $r$ , according to whether all values  $\tau_1, \tau_2$  etc. are greater or less than  $I$ .

It is clear furthermore that, speaking generally, equation (30) does not admit of any solution in the sense of lower algebra, since the quantities  $\tau_1, \tau_2$  etc. may be expressed by any kind of integral or fractional number. In order really to be in a position to determine  $q$  from a numerical equation of form (30), one would have to have recourse to the methods of higher algebra, by the help of which  $q$  could be calculated to the desired degree of approximation.

The unknown  $\lambda$  is then determined with the help of the price-equation which contains  $p_\gamma$  on the left-hand side, when  $p_\gamma$  can (according to equation (27) [50]) be replaced by  $I$ , and  $q$  by its value, which, as we have said, can be proximately determined from (30). One thus get an equation of the first degree with one unknown ( $\lambda$ ). (von Bortkiewicz, 1952, p. 21)

Von Bortkiewicz has introduced the special case of Value-calculation being identical to Price-calculation in passing,<sup>51/</sup> as he proceeds to fabricate, from it, a "general case", as outlined in the above quotation.

After von Bortkiewicz has confused the price of one commodity as a "measure of price" with the aggregate prices of commodities, viz., (27) with (30) respectively; after confusing the value of one commodity serving as a measure of value with the aggregate value of commodities, viz., (I0) <sup>52/</sup> with (I4) <sup>53/</sup>, it is on this basis that he erects his special case.

Since for von Bortkiewicz any commodity can be the "measure of value and of price", any single commodity whose turnover is fortuitously equal to a one "(yearly)" period of time, becomes the justification for identifying his dual systems of calculation. Hence, any one special commodity, on the basis of its turnover, becomes simultaneously, a general case to designate the prices and the

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50 (27)  $p_\gamma = I$

51 To draw an analogy, von Bortkiewicz has found that the parallels, i.e., his principle of Value-calculation distinct from his other principle of Price-calculation, do cross themselves not in the infinite, perhaps, but in actual fact after a "(yearly) turnover period. Hence, by bringing the infinite into the Belle Époque, he makes it last for a year, as it becomes equal to "one".

52 (I0)  $w_\gamma = I$

53 See footnote 49.



values of the rest of the commodities.<sup>54/</sup>

The unaimed terms in which von Bortkiewicz refers to the turnover period becomes evident from his remarks on what he calls "the general case". He pleads against a solution "in the sense of lower algebra". Now, even on the basis of simple curiosity, the reader might ask: what is a smaller  $q$  than  $r$ , or a larger  $q$  than  $r$ ? This, he answers, depends on whether  $\tau_1, \tau_2 \dots \tau_n$  (the turnover period) is greater or less than 1. And on what does 1 depend? Here, von Bortkiewicz would withdraw to his special case, from where he started. There, he has assumed that if one commodity is to be the "measure of value and of price" in terms of one turnover period, all commodities to follow suit in his special case, he would have erased and spirited away the ground for any comparison and determination of:

$$P_i = w_i \quad (i=1, 2, \dots, n)$$

While he proves unable to determine

$$P_i = w_i \quad (i=1, 2, \dots, n)$$

either for the general case, or for the special case, he is inexorably drawn to an exclusive one single commodity.

Therefore, it is difficult to understand how von Bortkiewicz could identify both systems of calculation for the aggregate "goods" where the turnover period for all is to be "constant and equal to one year" as he has made clear above. In other words, von Bortkiewicz would have to start from scratch every New Year's Day, while the last day of the "year" under his consideration, would represent a veritable apocalypse. In this special case, he has assumed what he had to prove, i.e., that

$$P_i = w_i \quad (i=1, 2, \dots, n)$$

while constant capital could not exist in his constrained suppositions. Leaving aside such incoherence, he merely confirms that his model might handle constant capital, only to expose an incapacity to hold it.

<sup>54</sup> "We assume in the following... (e) that all commodities have the same period of production, which is taken as one unit of time;" (Morishima, 1973, p. 12); "The period of production is uniform and so taken as the time unit." (Wolfstetter, 1973, p. 788)

But as if von Bortkiewicz was not totally satisfied with the "special case" he has portrait for us, he returns to it to discover that it is in fact the "general case" -if the wage has been outlayed repeatedly and simultaneously in both systems of calculation. In other words, that

$$p_i = w_i \quad (i=1, 2, \dots, n)$$

even when the turnover period is variable, i.e. larger or smaller than 1, as soon as the wage outlays are spread identically in Value- and Price-calculation.

"Yet more can be learned from a study of the numerator and of the denominator in that 55 price-formula. Amongst the  $n$  commodities, let  $i$  be the ordinal number of the commodity, the price of which is under discussion. If the duration of the turnover period of commodity  $i$  equals that of the commodity serving as a measure of price sic, then the price of  $i$  will equal its  $i$  value. The equality meaning identity of the turnover periods would find expression in the fact that the magnitudes  $t_1, t_2$ , etc. would be equal should read: would coincide (zusammenfallen) for both commodities  $i$  and  $\gamma$  and that the amount of labour  $A_i$ , which is embodied in one quantitative (Mengeneinheit) unit of commodity  $i$ , is distributed over the turnover periods concerned in the same manner as is the amount of labour  $A_\gamma$ , which is embodied in one unit of price. Let this distribution be expressed by the formulae

$$A_i = a_{i,1} + a_{i,2} + \dots + a_{i,m}$$

and

$$A = a_{\gamma,1} + a_{\gamma,2} + \dots + a_{\gamma,m},$$

where the following ratios are valid

$$\frac{a_{i,1}}{A_i} = \frac{a_{\gamma,1}}{A_\gamma}, \quad \frac{a_{i,2}}{A_i} = \frac{a_{\gamma,2}}{A_\gamma}, \text{ etc.}$$

55 Here, von Bortkiewicz is referring to the following formula:

$$(20)\text{bis} \quad \frac{p_i}{p_\gamma} = \frac{\sum_{j=1}^m (1+q)^{t_{ij}} a_{ij}}{\sum_{j=1}^m (1+q)^{t_{\gamma j}} a_{\gamma j}} \quad (i=1, 2, \dots, \gamma, \dots, n)$$

N.B. Von Bortkiewicz does not specify "that" formula simply because he never actually expressed it.

On the basis of (20), we then get:

$$p_i = \lambda \{ (1+q)^{t_1} a_{i,1} + (1+q)^{t_2} a_{i,2} + \dots + (1+q)^{t_m} a_{i,m} \}$$

and

$$p_\gamma = \lambda \{ (1+q)^{t_1} a_{\gamma,1} + (1+q)^{t_2} a_{\gamma,2} + \dots + (1+q)^{t_m} a_{\gamma,m} \}$$

from which, owing to the above ratios, there follows:

$$p_i = \frac{A_i}{A_\gamma} p_\gamma$$

or

$$p_i = \frac{A_i}{A_\gamma}$$

and finally, having regard to (I7)

$$p_i = w_i$$

(von Bortkiewicz, 1952, p. 25)

In a word, von Bortkiewicz is stating that the values are identical to the prices for two commodities when there is no difference between the two commodities -and vice versa.<sup>56/</sup> Therefore, when values are identical to prices for two commodities, we have

$$p_i = w_i$$

Let us recount. In Value-calculation, he has assumed

$$(I0) \quad w_\gamma = I$$

that is to say, the commodity serving as a measure of value. In Price-calculation, he claims that

$$(27) \quad p_\gamma = I$$

is the commodity serving as a "measure of price". Above, it was shown that when value is identical to prices,

$$p_i = p_\gamma$$

then the following expressions are implicitly established in his

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<sup>56</sup> This is, now, in spite of the turnover period being not constant, but variable, and not equal to one turnover period, but "shorter" or "longer" than it, i.e. "one."

argument:

$$p_{\gamma} = I = \lambda \sum_{k=1}^m (I+q)^{t_k} a_{\gamma,k} \quad (k=I)$$

$$p_i = I = \lambda \sum_{k=1}^m (I+q)^{t_k} a_{i,k} \quad (k=I)$$

$$w_{\gamma} = I = \ell(I+r)A$$

and

$$w_i = I = \ell(I+r)A_i$$

In his own words and as quoted above, "If the duration of the turnover period of [commodity] i equals that of the commodity serving as a measure of price [sic], then the price of i will equal its [i] value." -regardless of the span of such a turnover period.

After he has assumed that commodities i and  $\gamma$  are both in Value- and Price-calculation identical to numeral one, he discovers that they are self-same to unity. A remarkable tour de force. We merely confirm that he has concluded what he has simply postulated, i.e.

$$p_i = w_i$$

advanced by him as a special case <sup>57/</sup>. This result is important for us as it is on the basis of this allegation that he will attempt to identify both his principles of calculation to be extended to the "rest" of the commodities.

As for the "general case", he has already exposed that as

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57 Obviously, von Bortkiewicz forgot to **prove** -even as an alleged special case- how is it possible that his expanded "goods," expanding their price at a compound rate can be identical to their value, which has grown at a simple rate at the end of one turnover period. We would further note that it denotes unprincipled eclecticism to argue that von Bortkiewicz was just considering these expressions in a discrete manner and purporters of this argument ought to explain how he could traverse the continuous span from nought -or from anywhere- without somersaults.



the rate of profit might be smaller or larger than the rate of surplus value, aside from the lack of coincidence of his dual principles of calculation, it is only by means of "higher algebra that a desired degree of approximation" would be achieved while he makes clear that he is proceeding to solve for his unknowns in a "proximately determined" fashion. But as if these "practical" inaccuracies at which he has arrived were troubling him, he returns to such "general case" further on, expressing, this time, helplessness:

"If, on the contrary, the turnover periods of commodity  $i$  do not equal those of commodity  $\gamma$  (which serves as a measure of price [sic]), then the price  $p_i$  will be greater or smaller than the value  $w_i$ , according to whether the turnover periods of  $i$  are generally longer or shorter than those of  $\gamma$ . It is not possible to formulate this relationship more precisely."  
(von Bortkiewicz, 1952, p. 25; emphasis added)

In brief, von Bortkiewicz seems actually to have forgotten how to use his vaunted "higher algebra", as soon as the rest of the commodities he considers are not self-same to the one he has assumed. In order to confirm this recantation -in spite of his pledged quantitative precision- he adds next that

"It would, for instance, not be correct to assert that what is decisive for the relationship between  $p_i$  and  $w_i$  [i.e., Price-calculation and Value-calculation of commodity  $i$ ] is the circumstance whether the average [sic 58/] duration of the turnover periods is greater for one [commodity  $i$ ] or for the other [commodity  $\gamma$ ] of the two commodities [ $i$  and  $\gamma$ ].

Such an assertion does, however, approximate fairly closely to the truth, at least in those cases where  $q$  is so small that one is justified in neglecting its second and higher powers."  
(von Bortkiewicz, 1952, pp. 25, 26)

In the first paragraph, he claims that it is not decisive -as it is a matter of circumstance whether the turnover period is greater for one commodity (say  $i$ ) or for the other commodity (say  $\gamma$ ) of the two commodities ( $i$  and  $\gamma$ ) in "the relationship between  $p_i$  and  $w_i$ ", i.e. between the price and the value of commodity  $i$ . In the second paragraph he recants, as he claims that although the first assertion is incorrect, it "does, however, approximate fairly closely to the truth," -"at least" when the rate of profit is "so small" that he finds it justifiable to neglect second and higher powers. But what is a rate of profit that is so small? To answer that it is a rate of

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58 Von Bortkiewicz cannot speak of an average, i.e. "whether the average duration of turnover periods", as he has reduced value to an index. He means, as before, "whether the turnover periods".

profit which is not large, would have placed him in full evidence. However, he could not have done better as he has pre-empted the determination of the very rate of profit. It was enough for him to speak of the smallness of the rate of profit, in his enlightened acceptance of ordinary jargon. It is through these circumventions that he manages to "approximate fairly closely to the truth" <sup>59/</sup>

He confirms and seizes on his self-approved rightfulness next:

"Availing oneself of this justification [where  $\varrho$  is so small, so tiny that one is justified in neglecting its second and higher powers], formula (20) assumes the following form:

$$(32) \quad p = \lambda \{ (1+t_1\varrho)a_1 + (1+t_2\varrho)a_2 + \dots + (1+t_m\varrho)a_m \}.$$

If we were to follow formula (21) [60/] and if we introduce the new designation

$$\frac{a_1 t_1 + a_2 t_2 + \dots + a_m t_m}{a_1 + a_2 + \dots + a_m} = d$$

then (32) becomes

$$(33) \quad p = \lambda A(1+\varrho d)$$

The magnitude  $d$  represents nothing other than just this average duration of the turnover periods [should read: this duration of the singular turnover period] for the production and distribution of the commodity concerned. Since  $d$  differs for each commodity, it is necessary to show by an index the commodity to which a particular  $d$  refers. We thus get the equations:

$$(34) \quad p_i = \lambda A_i(1+\varrho d_i)$$

and

$$(35) \quad p_\gamma = \lambda A_\gamma(1+\varrho d_\gamma)$$

<sup>59</sup> Von Bortkiewicz could have extended his unrestrained knowledge to physics, as he pledges himself to be undeterred:

"In the theory of prices, just as in other regions of theory, there is nothing to prevent one from applying the principle of compound interest also to the case where the period after which interest is due, or the turnover period, is no longer expressed by an integral, but by a fractional number of years." (1952, p. 17; emphasis added) Hence, he could have stated that for two bodies, where one is moving at a uniform acceleration and the other has kept constant at the velocity which both were to start, both would have covered the same distance at the end of one period of time. Furthermore, allow the latter body to start a "fractional" time earlier, and the former will never reach the one which maintains the constant speed. And this is according to von Bortkiewicz's brand of truly spherical -and empty- logics. Moreover, the result "does, however, approximate fairly closely to the truth".

$$60 \quad (21) \quad a_1 + a_2 + \dots + a_m = A$$

Since  $p_\gamma = I$  and  $\frac{A_i}{A_\gamma} = w_i$ , we get

$$(36) \quad p_i = \frac{I + \varphi d_i}{I + \varphi d_\gamma} w_i$$

Thus  $p_i$  would be greater or smaller than  $w_i$ , according to whether  $d_i$  is greater or smaller than  $d_\gamma$ . But, as we have already said, the validity of this simple relationship is not absolutely strict.

The transition from value-calculation to price-calculation thus alters the exchange-relationships in favour of those commodities the production (and distribution) of which are marked by relatively long turnover periods, and to the disadvantage of those commodities where the contrary prevails."

(von Bortkiewicz, 1952, p. 26; emphasis added)

Let us start from the end. With his usual perspicacity, he presupposes the turnover period of any one commodity, which he chooses to designate as  $\gamma$ , to go on and designate the turnover periods of the "rest." It is blatant that by ascribing to one commodity,  $\gamma$ , the odd virtue of being "the measure of value and of price", von Bortkiewicz has only transferred his difficulty. He attempts to determine one value by another value, which on its side wants to be determined. As if this was not enough, and in a feat of strabismus, he claims to determine, alongside, one price by another price, which on its own is claimed to be the "measure of price". As if there was a shortage of logical scruples, von Bortkiewicz sets off by speaking of a commodity serving as a measure of value and of price, whose value and price form avoid determination; being, in consequence, devoid of measure.<sup>61/</sup>

In expression (36), which is an elaboration of his "general case", he exposes the self-confessed incapacity to establish a valid -or grounded- relation derived from his system.<sup>62/</sup> It is not only that

61 Further, let us remember that according to his assumed proportionality -by now somewhat lame- for every commodity  $p_i$  there would be "basically"  $n(n)$  prices, as every sole commodity is assumed to have a price in relation to all the rest, adn vice versa. This is without taking into account the plethora of values he advances to us, in a similar combination. Nor the duality of standards, i.e. labour and wage labour "as such", both, in his Value-calculation and Price-calculation, alongside the rest of varieties of "absolute value" that he sports.

62 As usual, in the next page he finds himself advancing a corresponding palinode:

"Formula (36) and the precise formulae on which it is based, show



it is not absolutely strict. To be precise, it is purely fortuitous. Far from establishing a "general case", he has simply regressed to the case where a turnover period is identical to one for both "goods"  $i$  and  $\gamma$  in Price-calculation, after having made the rate of profit "so small" that he finds it righteous to neglect its second and higher powers. After this neglect, his "general case" recurs to his special case, that is to say, unique case.

Furthermore, as far as (36) goes, he claims first that it would be incorrect to assert as decisive the different duration of the turnover periods greater for  $i$  or  $\gamma$ , whose variation is circumstantial. Immediately after, he recants, asserting that it would be correct to assert as decisive the different duration of the turnover periods, once the second and higher powers of  $q$  are disregarded. While he claimed that the problem could be solved precisely by means of "higher algebra", he states next that it is not possible to formulate it more precisely. However, he claims that it is correct by decreeing a rate of profit "so small" that its second and higher powers are righteously omitted.

Finally, while in (36) he concludes that it would favour commodities whose production and distribution would have "relatively long turnover periods" and disfavour those which have short turnover periods, this is relatively speaking, as he confirms the lack of regulation for such turnover periods. He asserts the inconclusiveness of such expression.<sup>63/</sup> An unprincipled transitional programme devoid of determination.

## 8. The system in its entirety

We have seen that von Bortkiewicz confuses productive consumption -which constant capital actually undergoes- with individual

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also that a rise in the rate of profit ( $q$ ) will raise the prices of those goods, the production of which is marked by turnover periods of relatively long duration <sup>43/</sup>, which depress the prices of the others [with relative short duration].

<sup>43/</sup> i.e. again in comparison with the commodity serving as a measure of prices [sic]." (von Bortkiewicz, 1952, p. 27)  
It did not occur to him that the self-avowed invalidity and imprecision of his conclusion was merely an unavoidable result of his implicit formulae.

<sup>63/</sup> Curiously enough, Professor Bajt claims that  
"L. von Bortkiewicz <sup>12/</sup> showed [sic] that the different [sic] rates of turnover of capital [should read: of commodities] have a



consumption, in order to present the process of depreciation as one of profit yielding, instead. This confusion between production and consumption is of no use, as a piece of capital equipment cannot yield profits in the production process as it undergoes productive consumption. In other words, constant capital cannot both appreciate and depreciate itself simultaneously. However, throughout Price-calculation we have seen that constant capital is pre-empted.

Von Bortkiewicz performs the absurdity of making price the "measure of price". He also finds that the "real wage" and a profit compose the price of a commodity. Simultaneously, that they constitute the elements into which price resolves itself.

While he discovers that the prices of commodities are directly determined by wages, he finds also that wages affect the prices of commodities not in a direct manner.

He upholds a "real wage" not only in Price-calculation, but also in Value-calculation. After this paradoxical duality or "real wage" is purported, he proceeds to identify it with the "money wage", i.e. with the sole wage rate, and the "goods" consumed by the labourer.

It is not simply that profits remain unexplained. In addition, they are purported as an empty rate, which aside of being identical to itself, is a compound markdown of prices and a compound markup of the wage rate, corresponding to the wage rate and to prices, respectively. The rate of profit subsides subsequently by means of von Bortkiewicz's assumptions.

Each "price-equation" for him poses three questions, as he has slipped in two standards for accounting prices; the "price of money" and a sole rate of wages. As he assumes proportionality, the encounter of a third unknown, i.e. prices, is already implicit in the "set of price-equations" by which the question is artificially posed

His "goods" allow as much freedom of will from their imaginary consumers as they are able to exercise, since each of the  $n(n)$  "goods" has, correspondingly,  $n(n)$  prices. Moreover, in so far

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similar influence on deviations of prices of production from their values as the composition  $\angle ? \angle$  of capital  $\angle ! ? \angle$ .

12 Bortkiewicz, 'Wertrechnung und Preisrechnung,' pp. 28, 41-42." (1970, p. 373)

Von Bortkiewicz never speaks of turnover of capital; only of commodities in relation to  $\gamma$ , confined to his unsustained argument.

as each can be the "measure of price" for all the rest, they would have as many prices as "measure of prices" multiplied by the number of commodities themselves. An elephantine surfeit of "basic" prices.

The whole aberration is crowned as he introduces a new "measure of price" over and above the other ones. This time it is to be a mélange of two distinct principles; Price-calculation and Value-calculation.

He picks at random one of his n special commodities, as he makes every single one of them a most general case to compare against it all the rest, in their turn.

As he claims that "nothing can prevent one", he presents Price-calculation expanding at a compound rate of growth. However, he finds that they are tantamount to the same at the end of one turnover period, unsurmountable for him. After he has secluded himself in a turnover period, he further assumes that all the commodities are to be self-same, so that there would be no difference at all between Value- and Price-calculation. While he claims that it is a special case, it constitutes his justification for such an unprincipled transitional presupposition. Therefore, in order to identify Value- and Price-calculation, all the goods in their entirety are to be the same, turning over in an identical period of time, i.e. in one "(yearly)" period; a moment at which they are to be voraciously consumed individually. This is in order to start -from the fertile remnants in the form of "ashes" as it were- a period of turnover <sup>64/</sup> from the last day of the "year".

As soon as he tried to give rigour to the "circumstance" where two or more commodities -including the one serving as a "measure of price" - do not have the same turnover periods, i.e. his "general case", he does it by attempting to regress to his special case. At the same time, he assumes that the rate of profit had to be so little that he could disregard its second and higher powers. Further, he is explicitly unable to derive any conclusion for more than one turnover period, not to mention engaging in its corresponding differentiation.

Von Bortkiewicz's labours are not characterized by

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64 Actually, not a word is uttered about the production of commodities, i.e. their productive consumption. Von Bortkiewicz's imaginary consumers do not seem to engage themselves in production of any kind whatsoever.

originality, as he himself concedes <sup>65/</sup>. However, he claims that the original model as such, from where he borrows, is "elegant, but sterile. Fortunately this is not the case" with his own revamped version, as he has rescued it and put it to "good" use to "criticize" Marx; attaining a "proper perspective" thereof;<sup>66/</sup> as he has already exposed his cobbling abilities.

What caps von Bortkiewicz and his troupe of expressions -among other things, is that he has been working with indexes in the guise of referring to the magnitudes of commodity values. Unfortunately, he appears unable to specify the denomination of such indexes <sup>67/</sup>.

Stopping, therefore, for some time, we have allowed ourselves to deal in some detail with his double principles of Value- and Price-calculation in order to consider any relevance that the current work under examination might have. So far we have observed that it is supported on shifting sands.

#### a. An implicit blueprint

While considering Price-calculation, von Bortkiewicz has been increasingly admixing it with Value-calculation. This is in

65 "The above algebraic solution of the price-problem has been taken, in its essentials, from a work by W. K. Dmitrieff <sup>31/</sup>.

31 The title of this remarkable work, which appeared (in Russian) in Moscow in 1904, is Economic Studies, 1st. series: Attempt at an organic synthesis of the Labour Theory of Value with the Theory of Marginal Utility. Separate discussion is devoted to: (1) Ricardo's Theory of Value, (2) A. Cournot's Theory of Competition, and (3) The Theory of Marginal Utility. Since the author employs algebraic and geometrical means of exposition and demonstration, it is hardly surprising that his publication (apparently a first work!) has received very little notice (I mean of course from Russians), although it bears evidence of an exceptional theoretical talent and presents something really new." (von Bortkiewicz, 1952, p. 22)

66 "The question is whether Dmitrieff's set of equations sheds any light on those particular points which, as Marx maintained, could be in their proper perspective [sic] with the very help of the Marxian model [sic], and only with its help. Were Dmitrieff's model to indicate nothing further than the question of price-formation (including wage-formation), regarded as a mathematical problem, is soluble, given the technical conditions of production of commodities (including the commodity labour power), then there would be some justification in saying of this model: elegant, but sterile. Fortunately this is not the case, and we shall now indicate the consequences resulting from those algebraic formulae, firstly for the theory of prices, and then for the theory of profit." (1952, pp. 24, 25)

67 Hence, it appears that the generous compliment of sterility that von Bortkiewicz kindly bestows at Dmitrieff, backfires.

spite of each having being posed by von Bortkiewicz as two distinct principles; two systems. For him to be distinctive is tantamount to being the same.

Let us briefly enunciate his implicit blueprint.

$$P_{II} = \left[ \sum_{i=1}^n \sum_{j=1}^m (I+\varrho)^{t_{ij}} \lambda_{a_{ij}} \right]_{II}$$

$$P_{III} = \left[ \sum_{i=1}^n \sum_{j=1}^m (I+\varrho)^{t_{ij}} \lambda_{a_{ij}} \right]_{III}$$

Here, II refers to immediate consumption of worker's "goods" and III to immediate consumption of capitalist's "goods". No productive consumption takes place with von Bortkiewicz's formulae, as we saw that constant capital is precluded.

According to his presupposed proportionality,

$$P_{II} = \left[ \sum_{i=1}^n \sum_{j=1}^m (I+\varrho)^{t_{ij}} \lambda_{a_{ij}} \right]_{II} = \sum_{i=1}^n \sum_{j=1}^m \lambda_{a_{ij}}$$

and

$$P_{III} = \left[ \sum_{i=1}^n \sum_{j=1}^m (I+\varrho)^{t_{ij}} \lambda_{a_{ij}} \right]_{III} = \sum_{i=1}^n \sum_{j=1}^m \lambda_{a_{ij}} \left[ (I+\varrho)^{t_{ij}} - I \right]$$

The price "equations" are simply circumlocutions whereby their constituting elements are at the same time the fractions in which it resolves itself, i.e. wage and profit in the form of rates. The latter swiftly subsides according to von Borkiewicz's assumptions. Hence, the whole of III declines alongside the share of profit in II. Therefore,

$$P_{II} = \sum_{i=1}^n \sum_{j=1}^m \lambda_{a_{ij}} - \left\{ \sum_{i=1}^n \sum_{j=1}^m \lambda_{a_{ij}} \left[ (I+\varrho)^{t_{ij}} - I \right] \right\}_{II}$$

Finally, let us note that von Bortkiewicz postulates that



$$P_i = w_i$$

This implies that

$$(I+q)^t A \lambda = (I+r) \ell A$$

as

$$(8) \quad w = (I+r) \ell A$$

and

$$(19) \quad p = (I+q)^t A \lambda$$

when the turnover period is "constant" -meaning immutable and identical to "one". Hence,

$$t = I.$$

### P A R T III

#### FABRICATION OF THE "TRANSFORMATION PROBLEM": A DUALITY OF VALUE

#### AND THE ART OF DOUBLE ACCOUNTING

### C H A P T E R VII

#### INTRODUCTORY INCOHERENCIES

#### I. A circular itineration between two distinct principles

Let us consider several paradoxical arguments advanced by von Bortkiewicz himself, while he tries to give credence to his claims.

"It is easy to show that the procedure employed by Marx for the transformation of values into prices is erroneous, since it fails to keep separate rigorously enough the two principles of value- and price-calculation." (von Bortkiewicz, 1952, p. 8)

What von Bortkiewicz claims is that there is

- i) a principle of Value-calculation;
- ii) a principle of Price-calculation.

Once the statement of two principles of calculation is acknowledge, the purporter ought next to explain how two independent and unrelated principles of calculation come to exist alongside with each other, and furthermore, to explain a relationship between the two, if the readers are to understand how price is determined by value.

The quotation yields further interest in that von Bortkiewicz misleads the reader by naming a process as a transformation when in fact he is suggesting an act of transubstantiation, as it were. His subject matter would not be how value changes its form and becomes price (how prices are transformed values), but how the two distinct principles do actually "transmigrate." Hopefully, he will enlighten us in the plausibility of these puzzles.

2. To keep separate two distinct principles is to recalculate one into the other

In launching an attack on Marx's procedure of transforming values into prices (of production), von Bortkiewicz has an ostensible apprehension. If he -von Bortkiewicz- was to keep each of his own principles, Value-calculation (comprising its Constant and Variable Capital, and a Rate of Surplus Value) and Price-calculation (comprehending its Constant and Variable Capital and a Rate of Profit) "separate rigorously enough" -as he claims they ought to be-, it follows that Value-calculation could not be transformed into Price-calculation.

So as to get away from this fatal outcome, he makes an about turn and asserts that "it is inadmissible to exclude from the recalculation" the Constant and Variable Capital of Value-calculation into that Constant and Variable Capital of Price-calculation, while he is still concerned with

"deducing prices from values in the way in which this is done by Marx. He [Marx] made the mistake of carrying over certain magnitudes without alteration from the table of values into that of prices. In transforming values into prices, it is inadmissible to exclude from the recalculation the constant and variable capital invested in the various spheres of production."  
(von Bortkiewicz, 1952, p. 9)

Von Bortkiewicz obliterates that he himself has turned value into a principle of its own; likewise with price. He forgets that each principle of calculation is a self-contained and distinct one. He even has to forget that each one is a principle. He loses memory of everything. To rescue his dual systems of calculation, he sacrifices them. Meanwhile he has provided a most peculiar procedure to transform his dual principles, as far as the last impromptu goes.

Let us note that this bold thinker attacks Marx for not keeping separate rigorously enough the two principles of Value- and Price-calculation; each comprising its own Constant and Variable Capital. In the next page, he recants as he claims that it is inadmissible to keep separate rigorously enough Constant and Variable Capital in each principle -as he resolutely calls for their recalculation.

We can just ask again, how can he plead to us that Constant and Variable Capitals should be excluded from recalculation -as the

principles to which they belong are to be kept separate rigorously enough- while he is most adamant about their being recalculated two paragraphs later? Von Bortkiewicz seems to have been depleted of any logical scruples whatsoever <sup>1/</sup>.

1 Absurd as it might appear, this sophism is a touchstone for the plethora of compilers and vulgarizers who enter into the subject soldiering on Marx. For instance,

- "The real world is one of price-calculation; why not deal in price terms from the outset?

A Marxist can safely concede something to this point of view. There seems to be no doubt that value-calculation is of little assistance" (Sweezy, 1946, pp. 128, 129)

"The source of Marx's error is not difficult to discover. In his price scheme the capitalists' outlay on constant and variable capital are left exactly as they were in the value scheme; in other words, the constant and variable capital used in production are still expressed in value terms." (Sweezy, 1946, p. 115)

- "According to Marx's own argument, the labour theory of value fails to provide a theory of prices." (Robinson, 1974, p. 17)

"As a logical process, the ratio of profits to wages for each individual commodity, can be calculated when the rate of profit is known. The transformation is from prices into values, not the other way." (Robinson, 1974, p. xi)

- "'Contemplate two alternative and discordant systems. Write down one. Now transform by taking an eraser and rubbing it out. Then fill in the other one. Voilà! You have completed your transformation algorithm.'" (Samuelson, 1971, p. 277)

"For he [Marx] mistakenly kept the same constant capitals,  $c_j$ , in his price calculation as well as in his value calculations. But what are the cs? They are items that have been produced in earlier stages of production, and the same logic that causes values to be changed into prices requires that their values also be converted into prices. Thus, it is argued, Marx went only part of the way and erred in retaining some elements of values calculation in arriving at his prices.

I must agree with this." (Samuelson, 1971, p. 291)

- "The statement that Marx's Theory of Value is not a theory of price may be construed in two ways -one weak and the other strong. The weak sense would be that value theory can predict prices, but that Marx was not (and by implication Marxists should not be) interested in this aspect of the problem. The strong sense is that in principle Marx's theory of value cannot be used to obtain prices." (Gerstein, 1976, p. 251)

"In short, Marx transformed the value of the output of the production process, but left the inputs unchanged." (Gerstein, 1976, p. 251)

- "Marx's transformation is not only wrong but superfluous because prices etc. can be obtained without any reference to value whatsoever." (Harris & Fine, 1976, p. 149)

"However, even if Marx is lucky enough to calculate  $r^1$  correctly by  $r$ ,



his subsequent calculation of prices of production is wrong. For Marx does this subsequent calculation by marking up individual costs in value terms  $(c+v)$  by the rate of profit to obtain the price of production  $(c+v)(1+r)$ . This is illegitimate, for as we have already observed, the individual costs in value terms should first be transformed into prices of production prior to the mark-up by the rate of profit." (Harris & Fine, 1976, p. 149)

-"(ii) the transformation problem can be formulated by taking inputs at their transformed prices rather than at their values. This is susceptible of rigorous formal treatment and computation." (Nutti, 1977, p. 97)

"In his treatment of the transformation of values into prices (in terms of labour embodied), Marx made...mistakes... (ii) he determined the 'transformed' prices of production on the assumption that inputs were acquired at prices equal to values instead of at the 'transformed' prices" (Nutti, 1977, p. 97)

-"the 'transformation problem' is a pseudo-problem, a chimera; there is no problem of deriving profits from surplus value and production prices from values to be solved;" (Steedman, 1977, p. 15)

"It was stated above that a minor problem with Marx's solution is that he failed to transform input prices." (Steedman, 1977, p. 31)

-"First in the equations, prices of production are calculated on the basis of the means of production and labour-power consumed being assessed as capital in value terms. This clearly means that prices of production cannot be any representation of exchange value;" (Himmelweit & Mohun, 1978, p. 97)

"to account fully for the formation of a general rate of profit, not only output values but also input values require transformation." (Himmelweit & Mohun, 1978, p. 97)

-"However, the capitalist, when he buys means of production (and the worker, when he buys means of subsistence), pays for them at their prices of production, not at their values." (Morishima & Catephores, 1978, p. 153)

"A fully consistent method of transformation should, therefore, simultaneously transform outputs and inputs, not just outputs." (Morishima & Catephores, 1978, p. 153)

-"If prices of production are not proportional to labour-values, and if the determination of prices is a problem analytically independent of the determination of values, one might be led to the conclusion that the Marxian theory of value must be rejected." (Roncaglia, 1978, p. 139)

"It is well known that the scheme proposed by Marx in Chapter 9 of Volume III of Capital for the determination of the prices of production is not logically rigorous because the prices of production of commodities are calculated by adding profit (at the average rate prevailing in the system) to the values and not to the prices of capital advanced. Furthermore, the average rate of profits is also calculated as a ratio of magnitudes expressed in values (surplus-value and constant and variable capital advanced in value) and not in prices." (Roncaglia, 1978, p. 137)

the following:

Marx's procedure is wrong as it fails to keep the principles of Value- and Price-calculation separate rigorously enough. Nevertheless, von Bortkiewicz's procedure is right for failing to keeping them separate rigorously enough, as it is inadmissible not to recalculate them;

Marx is wrong as he did not recalculate thoroughly the two principles of Value- and Price-calculation. Von Bortkiewicz is right as he did not recalculate them thoroughly; claiming that they should be kept separate rigorously enough;

Marx is wrong as he did not keep separate the two principles of calculation rigorously enough. Von Bortkiewicz is right as he demands they should not be kept separate rigorously enough; they should be thoroughly recalculated.

Although von Bortkiewicz has proved that the recalculation of one of his principles into the other would merely destroy his stringent precepts, still, one principle should be recalculated into the other. He is consistent enough to advance as a dictum that one principle of his ought to be accounted into another, even when this could be but a preposterous possibility. Meanwhile, these incoherence demonstrates that this inexpugnable and enigmatic sophism must be preserved.<sup>2/</sup>

Experience merely confirms that once this surprising code of practice is set up to "show that the procedure employed by Marx for the transformation of values into prices is erroneous"<sup>3/</sup>, further

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"The influence of finance capital, the stock market, and the rates of interest will all lubricate the process of equalisation of the profit rates. As we have argued, this process leads towards an equalisation of the rate of profit in price terms; there is no process which leads towards an equalisation of the rate of profit in value terms." (Hodgson, 1974, p. 382)

"The abstract model of a pure capitalist economy in which the rate of profit is equalised allows us to analyse the relation between values and prices of production, and the derivation of the latter from the former. Our results are both scientific and relevant to all capitalist economies." (Hodgson, 1974, pp. 382, 383)

<sup>2</sup> In this respect, it is interesting to observe that

"On the level plain, simple mounds look like hills; and the imbecile flatness of the present bourgeoisie is to be measured by the altitude of its great intellects." (Marx, 1918, p. 568)

<sup>3</sup> Von Bortkiewicz, 1952, p. 8.

reproduction of these allegations to the procedure employed by Marx through one form out of another, undergoes, as it were, compound growth throughout time, with no lack of followers sprouting everywhere <sup>4/</sup>.

A false criticism of Marx is not given by von Bortkiewicz because von Bortkiewicz himself has an absurd doctrine of value, but an absurd doctrine of value is supplied because he fails even to distinguish the difference between price as a form of value, and the replacement of price and value with dual systems of accounting.

### 3. The absence of any confusion becomes in fact a confusion

"Marx's error is due to the illogical method he used in deriving prices from values; it is not caused primarily by any confusion between the concept of value as an index of an exchange relationship and the concept of absolute value. Such a confusion might at most have been accessory, for when Marx's calculation led him to the result that total price = total value, it is possible that he should have seen in this a confirmation of the view that the value of all goods taken together had a significance which could not be modified by the 'capitalistic method of calculation' (i.e. by applying the principle of price calculation). Since, however, this view can only be put forward on the condition that the value of all goods is taken to mean their absolute value, this might, in fact [this 'might, in fact' is a gem!], mean a confusion of the two concepts of value on the part of Marx 17/."

17 This confusion appears more clearly in Hilferding's Marx-Studien, I, p. 32."

(von Bortkiewicz, 1952, pp. 11, 12; emphasis added) 5/

4 While recognition is often given to von Bortkiewicz's epoch making discovery, Paul Marlor Sweezy deserves full credit as a successful pioneer in vulgarizing this onus:

"[I]t was Bortkiewicz who laid the basis for a logically unobjectionable proof of the correctness of Marx's method, a fact which entitles him to be considered not only as a critic but also as an important contributor to Marxian theory" (Sweezy, 1946, p. 70) We would just add here that Sweezy is riddled with confusions. He takes "correctness" for incorrectness; he takes laying "the basis" for groundlessness; he takes a "logically unobjectionable proof" for a destitution of proof; a "fact" for an endless chain of distortions etc., etc. This is a most ordinary example of an unprincipled eclecticism which is most dexterous to dilate vulgar economics, as it disguises itself in an enlightened divulgation of Marx's work -or of its "anomalies."

5 According to Hilferding,

"It [Marxist theory of value] therefore renders the magnitude of value theoretically measurable. But when Böhm-Bawerk insists that Marx ought to have furnished the empirical proof of his theory, and when he contends that the requisite proof would have consisted in demonstrating the relationship between exchange values or prices and quantities of labor, he is confusing theoretical with practical measurability." (1949, p. 146)



It is not necessary to have much acuity to realize that in the first sentence above, von Bortkiewicz claims that Marx's error is not caused by any confusion between the concept of value as an index of an exchange relationship and the concept of absolute value; then, that such confusion might at most have been accessory, only to conclude that this "might, in fact, mean a confusion of the two concepts of value on the part of Marx".

As for von Bortkiewicz's allegations in the above paragraph, the argument he raised in the first sentence refutes his last assertion. Meanwhile, his dictum of "error" putatively caused by Marx's "illogical method" is merely a conjectural statement. So, von Bortkiewicz's charge of "illogical method" backfires again. <sup>6/</sup>

Despite not having proven the very imputation that he himself has raised against Marx, quite apart from contradicting himself, von Bortkiewicz has apparently strengthened his position and peculiar course of action giving the semblance of approximating Marx's better intentions (despite his evident inability to sufficiently even recognize them). He has thrashed about effectively enough, eventually sowing not only endless vulgarizers of himself but also some equally heavily disguised coryphaei who might be heard harmoniously anticipating their author's demise.

#### 4. The quantitative incongruity as a whole is to be a necessary permissiveness

As we observed at the very beginning of this work, von Bortkiewicz alleges a quantitative incongruity in Marx.<sup>7/</sup> While von Bortkiewicz evaded any specification of his claim at that stage, he did not hesitate to conclude later one, that it "would not be permissible" to avoid such incongruity, i.e. to enter into a

Hilferding acknowledges a dual measurability, i.e. the "theoretical" and the "practical", falling in the ambiguity exposed by von Bortkiewicz from the outset. Hilferding does not refute this duality, viz., a "theoretical standard of measurement" and a "practical standard of measurement (1949, p. 147). As Hilferding ascribes to Marx a "theoretical" measurability, he does not refute the pious idea uphold by von Bortkiewicz, that values can be measured in their price form and in a "parallel" one, viz., "absolute value".

6 We cannot fail to acknowledge that for von Bortkiewicz, to assert is to prove, and to prove is to disprove. Who need be astonished after his long and dutiful record of duplicity?

7 "The quantitative incongruity of value and price (more precisely: price of production) forms a specific characteristic of Marx's theory of the capitalist economy." (1952, p. 5; see p. I above)



congruity of the two principles:

"It would thus not be permissible to equate total price with total value whilst simultaneously equating total profit with total surplus value." (von Bortkiewicz, 1952, p. 12; emphasis added) 8/  
From the master's mouth, "The quantitative incongruity" is, after all, to be permissible. Dare we elucidate, a permissible absurdity, and necessarily a generalized absurdity, thanks to there being no exceptions to von Bortkiewicz's dictum, by his own rules, i.e. his double principles.

While von Bortkiewicz has the effrontery to assert on the one hand, that the "quantitative incongruity" is specific to Marx, this was just the proviso to inform us that it "would thus not be permissible" to solve "The quantitative incongruity". Hence, while the charges of specificity against Marx fall altogether, von Bortkiewicz arrives in the nick of time, as the veritable champion of "The quantitative incongruity of value and price" as a whole, with no shortage of complying followers 9/.

8 Winternitz's avowed "attempt to provide an alternative solution, on different assumptions from those employed by Bortkiewicz and Sweezy" (1948, p. 277; emphasis added), is merely a repetition of the above edict. Curiously enough, May (1948) dispels the fog as follows:

"When redundant algebraic verbiage is cleared away, the solution of Bortkiewicz (which was reproduced by Sweezy) is seen to be the same as that of Winternitz except that Winternitz defines price of production so that the total values equals the total of prices of production, whereas Bortkiewicz substitutes an ad hoc assumption. It is Winternitz, of course, who is consistent with Marx [should read: with von Bortkiewicz].  
(p. 597 n.; emphasis added)

9 "The weakest spot, discovered first by Bortkiewicz, is that Marx's thesis '...the sum of profits in all spheres of production must equal the sum of surplus values, and the sum of prices of production of the total social product equal the sum of its value' (III.171) is not entirely correct." (Bródy, 1970, p. 89)

"Further, the simultaneous equality between total surplus-value and total profit, and between total output measured in terms of labour-value and in terms of prices, upon which Marx hoped to build the link between the system of values and the system of prices of production, by deriving the average rate of profits as a ratio of quantities measured in value terms, is also logically unacceptable except in special cases." (Roncaglia, 1978, p. 159)

"On any plausible set of assumptions regarding the manner in which the different branches of the economy are interrelated, it will soon be found upon experimenting with various sets of figures that if the values of input as well as those of output are to be transformed into prices of production, it is normally impossible to effect a simultaneous transformation which will make total profit equal to

## 5. The transformation of value into price is banned

Von Bortkiewicz generalizes quite plainly that it would thus not be permissible to equate total value and total price and at the same time equate total surplus value and total profit. In other words, he proclaims "The quantitative incongruity" which bars the transformation of value into price. As can be seen, his opinions reappear dressed with the authority of edicts. It looks as if he was dressing up jurisprudence as political economy.

On examining them, this rigorous logician seems to have nothing substantial to say, aside from reassuring confession of mea culpa which is, moreover, shamelessly disguised and spuriously imputed to Marx. In brief, reading von Bortkiewicz is tantamount to an exposure of even formal logical incapacity. Magnificent economic science this that creates the common credence that it is impossible to transform value into price in a defection from the most elementary logical scruples. And all because it is claimed not permissible.

While von Bortkiewicz's statements present themselves as empty boasts which turn out to incriminate their professor, we will try to elucidate his double principles as he proceeds to pioneer the conversion of values into prices as a "problem" -all on his own.

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total surplus value and at the same time make total prices of production equal to total values." (Meek, 1967, p. 148)

"There is no longer any logical reason to uphold the general validity of these equations / on the one hand the equality between the sum of profits and the sum of surplus value and on the other hand the equality between the sum of prices and the sum of values / once the system of prices of production is written in an exact manner". (Abraham-Frois & Berrebi, 1976, p. 35)

"[I]n general, we cannot have total value equal to total price and total profit equal to total surplus value at the same time." (Hodgson, 1974, p. 386)

## CHAPTER VIII

### ALL LABOUR MUST LEAVE A SURPLUS

#### I. An apocryphal reproduction

Before we proceed to consider in greater detail the now familiar confusion of von Bortkiewicz when applying his double standards, bestowing a tergiversation and unfounded imputation that it was Marx who tried to solve the long and adventurous journey from the principle of Value-calculation into the principle of Price-calculation, let us see how von Bortkiewicz does reproduce Marx.

"Marx illustrates his model  $\left[ \begin{array}{c} \text{of calculation (Rechenschema)} \end{array} \right]$  with a numerical example, which is reproduced here. In view of our subsequent discussion, it will, however, be convenient slightly to modify Marx's assumed figures, by taking 50 and 52 -instead of 51 twice- for  $\alpha c$  in the spheres of production II and III. This is quite permissible, since Marx's numerical assumptions are completely arbitrary. We then get the following tables:

Table I : Value-calculation

Sphere of Production	Constant Capital	Variable Capital	Constant Capital used up	Surplus Value	Value	Rate of Profit
	(c)	(v)	( $\alpha c$ )	(m)	W	( $\frac{m}{c+v}$ )
I	80	20	50	20	90	20%
II	70	30	50	30	110	30%
III	60	40	52	40	132	40%
IV	85	15	40	15	70	15%
V	95	5	10	5	20	5%
I - V	390	110	202	110	422	22%

Table 2 : Price-calculation

Sphere of Production	Constant Capital	Variable Capital	Constant Capital used up	Cost-price	Profit	Price	Divergence of Price from Value	Rate of Profit
	(c)	(v)	( $\alpha c$ )	( $\alpha c+v$ )	( $m'$ )	(P)	(P - W)	( $\frac{m'}{c+v}$ )
I	80	20	50	70	22	92	+ 2	22%
II	70	30	50	80	22	102	- 8	22%
III	60	40	52	92	22	114	- 18	22%
IV	85	15	40	55	22	77	+ 7	22%
V	95	5	10	15	22	37	+ 17	22%
I - V	390	110	202	312	110	422	0	22% "

(von Bortkiewicz, 1952, pp. 7, 8)

Let us follow von Bortkiewicz in order. If he talks of Marx's example -"which is reproduced here", this is only to expose that such example has been nowhere "reproduced here." Forgetful as he is, he did not remember to back his words with a quote.

After this unexplained obliteration has been fulfilled, he explicitly finds that it was "convenient slightly to modify Marx's assumed figures" with regard to his subsequent discussion. His accomplished ability to modify might as well convey a slight though convenient alteration of figures; a slight though convenient qualification as to what the figures could convey, or it might however be convenient slightly to tone down as it were, Marx's example. In the end, if von Bortkiewicz has a quality which he holds unswervingly, it is that of being ambiguous, to give him his due.

In order not to modify von Bortkiewicz's originality -as we feel our duty to let itself incorrupt- we will consider Tables I and 2 in isolation. In doing so, we simply abide by his first advice. We will not fail to "keep separate rigorously enough the two principles of value- and price-calculation." (1952, p. 8). We will also bear in mind both his double principles of calculation and the duality of value he states from the outset, which we have had the opportunity to examine already in the first two parts of this work.

Attentive as he is, von Bortkiewicz warns us in a footnote concerning both his Tables, that

"It must not be overlooked that the values and prices in Marx's model refer, not to quantitative units of the goods concerned, but to their total quantities." (1952, p. 8 n.; emphasis added)

Therefore, we realize that von Bortkiewicz's example -in contradistinction to Marx's one- refers neither to the magnitude of value of the product of one -or more than one- capital expressed in money, i.e., sterling pounds, nor to the organic composition of capital(s) examined in the form of percentage ratios,<sup>1/</sup> but to pure and ethereal

1 "The organic composition of capital depends at each stage on two circumstances: First, on the technical relation of the employed means of production; secondly, on the price of these means of production. We have seen that this composition must be considered according to its percentages. We express the organic composition of a certain capital consisting of four-fifths of constant, and one-fifth of variable capital, by the formula  $80c + 20v$ . We furthermore assume in this comparison that the rate of surplus-value is unchangeable. Let it be, for instance, 100%. The capital of  $80c + 20v$  then produces a surplus-value of  $20s$ , and this is equal to a rate of profit of 20% on the total capital." (Marx, 1909, p. 182)



quantitative units devoid of substance of value and of magnitude -or extent- of value. In other words, each of von Bortkiewicz's Tables refer exclusively to aliquot parts or "quantitative units", viz., numéraires or indexes devoid of determination. The one commodity in which the value of commodities is expressed in its price-form, viz. money, is jettisoned by von Bortkiewicz by turning each single commodity into its "own" measure of value. Hence, for him, numeral I becomes the sole measure of value, devoid of content and determinateness: an empty cipher.

As von Bortkiewicz has "monetized" all his "goods", the commodity money -or universal equivalent- is supplanted by a dual notion of value; whereby

a) each commodity can be both the tautological measure of its "own" value, i.e., the numéraire "good". That is to say, value an "absolute.";

b) can show but a ratio with any other "good". That is to say, value -"merely the index".

In consequence, he is inexorably lead to make value tantamount to price, and vice versa.<sup>2/</sup> As we will confirm subsequently, one or the other of his Tables must turn out to be redundant and otiose, as Marx's differentiation of value and its price form will appear as an embarrasment for him. But let us not step ahead of his exposition.

While he speaks of "goods," his Tables do not refer to commodity capital -or to commodity capitals. He has supplanted each and every commodity by "goods". By the same token, he has replaced both the use value, and the substance and magnitude of value of commodities <sup>3/</sup> by indexes. In turn, von Bortkiewicz is committed to designate any of his goods by means of an ordinal number, viz., "I", and numeral one becomes the sole measure of value.<sup>4/</sup>

2 "The value of any commodity denoting its relation in exchange to some other commodity...we may speak of it as money-value, corn-value, cloth-value, according to the commodity with which it is compared; and hence there are a thousand different kinds of value, as many kinds of value as there are commodities in existence, and all are equally real and equally nominal." (/Bailey,/ op. cit., p. 39). Here we have it. Value equals price. There is no difference between them." (Marx, 1971, p. 147)

3 "The two factors of the commodity: Use-value and Value (Substance of Value, Extent of Value)" (Marx, 1908, p. 1)

4 In Value-calculation, it "can be discovered that amongst the n goods, there is also that which serves as a measure of value, or as money. Let  $\gamma$  be the ordinal number of this good. Then:

Curiously enough, von Bortkiewicz forgot to include in his Table of Value-calculation a column indicating the Rate of Surplus Value of Spheres of Production I to V. However, the fact that Marx expresses the different organic composition of commodity capital along with the production of surplus value in a percentage form, proves an embarrassment for von Bortkiewicz. Von Bortkiewicz himself is referring purely to aliquot parts. In this respect, such column would be altogether redundant for him.

Let us bear in mind the point already made, that for von Bortkiewicz the quantitative units of the goods on which he is most concerned <sup>5/</sup> can just be regarded as empty percentages or aliquot parts in his subsequent discussion, with no reference to any extent or magnitude of value of commodities.<sup>6/</sup>

As we have just remarked explicitly in this chapter, von Bortkiewicz has made clear that he will not refer to the masses of value whose organic composition of capital is expressed, by Marx, in percentage ratios. On the contrary, von Bortkiewicz will refer, merely, to quantitative "units" or mere indexes, devoid of extent of value and of substance of value, as we saw before. In a word, "units" or mere indexes denuded of meaning.

In spite of von Bortkiewicz's claim to follow Marx, we are left with no other choice than that of examining von Bortkiewicz's tables on the basis of his own assumptions, whereby extent of value is not expressed in its money form, but supplanted by empty "units" or aliquot parts devoid of any content whatsoever.

In the light of Value-calculation he expresses each onelfold

(IO)  $w_r = I$  "

(von Bortkiewicz, 1952, p. 14).

Likewise,

"Since  $p_r = I$ ," (1952, p. 21) this also holds good, in turn, for Price-calculation.

5 As quoted above,

"It must not be overlooked that the values and prices in Marx's models refer, not to quantitative units of the goods concerned, but to their total quantities."

(von Bortkiewicz, 1952, p. 8; emphasis added)

6 Therefore, it is not that the reproduction of Marx's example given by von Bortkiewicz is apocryphal because he has made slight alterations in it, but slight alterations are made in it because von Bortkiewicz has conveniently supplanted it.

increase in the Variable Capital as 100 per cent of it, moreover, under the heading of Surplus Value. As for Price-calculation, he presents the same level of expression, although the onefold increase in Variable Capital is expressed as 100 per cent in its entirety, under the heading of Profit.<sup>7/</sup>

Unruffled, he considers to have established a relation among five distinct percentages of increase -both on his table for the Value-calculation and on his Table of Price-calculation. Although each of the five different Variable Capitals is measured on its own by percentage ratios, it is self-evident that they are incommensurable among themselves. In Marx's words,

"[To] establish a proportion between [five] relations which, although measured separately by percentages, are nevertheless incommensurable with each other, is to establish a proportion between the percentages without reference to denominations." (Marx, 1978, p. 86; "five" substitutes "two" in the original)

Therefore, percentage ratios cannot be added among themselves, because they are simply percentage ratios and not the denominations themselves. Hence, ratios are devoid of homogeneity. In a word, percentage ratios are devoid of additivity and homogeneity.<sup>8/</sup>

For instance, in Value-calculation, 20 per cent of Surplus Value and 20 per cent of Variable Capital are expressed in a proportion. One is to the other as 1:1. This makes von Bortkiewicz deduce, rigorous logician that he is, that a Surplus Value of 100 per cent is worth not more nor less than a onefold increase of

<sup>7</sup> We must remember that in Value-calculation, "Equation (7)  $\sum w = A\ell + rA\ell$  brings to light the manner in which the value of the product is composed of wages ( $A\ell$ ) and of the capitalist's profit or surplus value ( $rA\ell$ )."  
(von Bortkiewicz, 1952, p. 14)

and in Price-calculation,

"A turnover period of 1 year would make profit equal  $\rho A$  (since  $\rho$  is the yearly rate of profit). Were the turnover period 2, 3 etc. years, profit would be not  $2\rho A$ ,  $3\rho A$  etc. [corresponding to simple interest in Value-calculation] but (because of compound interest)

$\{(1+\rho)^2 - 1\}A$ ,  $\{(1+\rho)^3 - 1\}A$  etc." (von Bortkiewicz, 1952, p. 17)

However, taking for granted that

"If the turnover period were constant and equal to 1 year, then...  $\rho$  [the rate of profit] would equal  $r$  [the rate of surplus value]. In this special case, there would be no difference at all between value-calculation and price-calculation." (1952, p. 21; see supra Ch. VI, in particular Section 7.)

<sup>8</sup> It is apt to remember that von Bortkiewicz does not and could not provide any basis, as simultaneously, he has turned every commodity into its own equivalent while he does away with money, the universal equivalent itself, as expounded in Chapter I above.



## Variable Capital.

While von Bortkiewicz has been shown unable to impersonate Marx so far, a first impression reinforced by his second table, we recognize, at last, further resemblances to P. J. Proudhon.

Let us continue our analysis of von Bortkiewicz as we review how Marx, as early as 1847, referred to Proudhon's discovery of the Surplus Left by Labour duly rehearsed by von Bortkiewicz once in Table I and again in Table 2.

"To save appearances, he [Proudhon] says that, for society, time is money. This error arises from his recollecting vaguely that there is a connection between value and labour time, and he hastens to identify labour time with transport time; that is, he identifies the few firemen, guards and conductors, whose labour time is actually transport time, with the whole of society. Thus at one blow, speed has become capital" 9/

Once speed has become capital -for von Bortkiewicz is telling us that the source of Surplus Value derives from the speed at which Variable Capital is circulated in different Spheres of Production- he finds accordingly, at the end of "one" period of time, the following epoch making revelation consistently cleaving to the double accounting:

"In considering first the value-calculation (Table I), we may assume that spheres of production I and V serve the production of subsistence goods for the workers, since the value of these goods (90+20) amounts to exactly as much as the wages received by the workers (II0). We may further assume that the spheres of production III and IV manufacture means of production, since the value of the goods concerned (I32+70) coincides with the value of the constant capital used up (202) in all spheres of production. The goods produced in sphere II, finally, would represent the consumption goods of the capitalist class, as the value of these goods (II0) is equal to the total surplus value. 'Simple reproduction' is assumed throughout." (von Bortkiewicz, 1952, pp. 8,9) 10/

While von Bortkiewicz has advanced this unlikely reckoning as a postulate, he proceeds further to expand his imputations:

"The equalization of the rates of profit (20%, 30%, etc.) [sic] brought about by competition, or, in Marx's own terms, the reduction of the different rates of profit in the various spheres

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9 Marx, 1978, p. 86.

10 "The value of the commodities produced in sector 1 must be equal to the value of the means of production required by all three sectors. The value of commodities produced in sector 2 must be equal to the value of the wage goods needed by the workers in all three sectors. Finally, the value of the commodities produced in sector 3 will make up the value of the luxury goods purchased by the capitalists, or the surplus value of the economic system as a whole.

This is, in brief, the Marxian schema of simple reproduction." (Pasinetti, 1977, p. 20)



of production to a common average rate of profit (22%), Marx believed to result merely in a different distribution of the total surplus value (II0) among the separate spheres of production or groups of capitalists." (1952, p. 8) 11/

As for von Bortkiewicz's explanations of the two dual principled Tables -equally interchangeable one for another- he forgets or ignores that he is not dealing with II0, but with II0:500, that is to say, 22 per cent.<sup>12/</sup> And as should be understood, an average profit of 22 per cent represents for the individual capitalist, sphere of production or social capital as a whole, an average profit of 22 per cent. Ni plus ni moins.

"What does M. Proudhon [and von Bortkiewicz] do? He [Proudhon, followed by his âme damnée,] takes percentages for capital, and, as if he were afraid of his confusion not being manifest enough, 'pointed' enough, he continues:" 13/

Let von Bortkiewicz continue for Proudhon.

"What happens now, when price-calculation (Table 2) replaces value-calculation? Production spheres I and V will still be making consumption goods for the workers, sphere II consumption goods for the capitalists, and spheres III and IV means of production. The sum of wages has not altered. Table 2, too, gives II0 for the variable capital in all the spheres of production

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11 We may even overlook that it was classical political economy that presupposed a common average rate of profit, i.e. without deducing it. It is an achievement of Marx to have analysed its formation on the basis of the value of commodities. As for von Bortkiewicz, we know he has already transmitted an ordinance banning its solution, the wording of which is at present being considered.

12 As before remarked, once von Bortkiewicz has turned value into a mere index -or mere units-, he can just refer, if as much, to aliquot parts precluding masses of value. Precisely in this respect, von Bortkiewicz himself has already warned us above that

"It must not be overlooked that the values and prices in Marx's models refer, not to quantitative units of the goods concerned, but to their total quantities." (1952, p. 8 n.)

13 Marx, 1978, p. 86. "Capital is concerned, that is, with both quantitative problems (the exchange ratios prevailing between commodities) and qualitative problems (that behind these quantitative ratios stood social relations)." (Pilling, 1972, p. 283); "This [the classical theory] stated, not that exchange ratios (or prices) were equal to the ratios of embodied labour (save in special conditions). It stated that exchange ratios were in the last analysis determined by the relative quantities of embodied labour in various commodities. The statement which was implied in Ricardo and developed by Marx in his famous theory of 'prices of production' is that". (Dobb, 1949, p.111) "In a commodity system it is products which are distributed and the allocation of social labour-time is regulated through the ratios in which products exchange one with another". (Cutler et al., 1977, p. 28 n.)

taken together. The workers should therefore be able to acquire for this sum the goods produced in I and V, neither more nor less. These goods, however, now have a price of 92+37, i.e. a total of 129. The workers thus must go short, or, put in another way, some of the goods made in I and V find no outlet. In this regard, therefore, the price model breaks down; nor is it correct with regard to the capitalists' consumption goods and to producer goods. We find a total profit of 110, as against the figure of 102 for the price of the goods in sphere II; whilst, for the producer goods, we get the figures 202 by taking the total constant capital used up in all the spheres of production, and 191 by taking the price of the goods made in III and IV."

(von Bortkiewicz, 1952, p. 9) 14/

But for instance, a deviation of 17 per cent for Sphere of Production V and a deviation of 2 per cent for Sphere of Production I would be -regardless of the way we look at it- a deviation of 17 per cent and of 2 per cent, respectively.

"How then can M. Proudhon say pertinently [emulated by von Bortkiewicz] that the social deficit in the case of a [19] per cent loss [as 'The workers thus must go short'] amounts to [19], when he knows neither the social capital nor even the capital of a single one of the persons concerned? 15/

Furthermore, a deviation of 18 per cent and a deviation of 7 per cent in Sphere of Production III and IV respectively, would be, nevertheless, a deviation of 18 per cent and 7 per cent in each Sphere of Production accordingly. It is difficult to understand how he found that there is a divergence of 11 per cent while remaining ignorant of the total social capital alongside the individual capital of the participants involved. Moreover, he repeats his manoeuvre with Sphere of Production II, when he argues destitute of information about the social, or individual capital of the participants when he postulates that there is a deviation of 8 per cent.

"Thus it was not enough for M. Proudhon [or for von Bortkiewicz] to have confused capital with percentage; he surpasses himself identifying the capital sunk in an enterprise with the number of interested parties." 16/

Furthermore, von Bortkiewicz doubles Proudhon's folly by maintaining his by now traditional accounting, i.e. of both Value-calculation and Price-calculation.

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14 "Marx, of course, did not quite get his sums right, but the trivial point that he wished to illustrate, I think, was made."  
(Blundell-Wignall, 1976, p. 284)

15 Marx, 1978, p. 87; "I9" substitutes "33" and "33 million" in the original.

16 Marx, 1978, p. 87.

One does not know, whom to admire more?: von Bortkiewicz in his boldness or his conspicuous followers who follow in his giant steps admirable for their effort if not their emulation.

"[Now] let us take a look at the consequences which we would arrive at, if we admitted this relation between speed and capital in the case of railways, as M. Proudhon gives it [and in the case of von Bortkiewicz's train of thought, between onefold speed of Variable Capital in relation to each individual Sphere of Production] -minus the mistakes in calculation." 17/

In considering Sphere of Production I, and V respectively, von Bortkiewicz is telling us that the conveyance of Variable Capital in I is four times higher than in V which is four times lower, costing nevertheless, the same outlay in whatever Sphere of Production. Thus, e.g., if in Value-calculation Sphere of Production I takes 360 Marks, Sphere of Production V would take only 80 Marks 18/.

"This would be, according to 'the rigour of mathematics,' the consequence of [von Bortkiewicz and] M. Proudhon's suppositions -always minus his mistakes in calculation. But here he [von Bortkiewicz, and Proudhon] is all of a sudden telling us that if [Sphere of Production V tries to get as much as Sphere of Production I], it would instantly lose all its consignments. Decidedly, we should have to go back to..." 19/

Sphere of Production I; to Sphere of Production III, or even further, to "direct labour" to avoid the obstruction of Constant Capital impinging on his tables. Despite the trouble von Bortkiewicz takes to develop his double accounting, he seems not to have reaped its first and most obvious lesson illustrated by his Value-calculation.

As far as Price-calculation is concerned, let us see where we are led by taking Sphere of Production I and Sphere of Production V, which take for von Bortkiewicz 368 Marks and 148 Marks respectively 20/. Once again, his Price-calculation compels the willing reader to go back to Sphere of Production I, to Sphere of Production III, or even to "direct labour" because the Constant Capital of his rigorous charts emerge as a computational embarrassment.

Even the willing reader is not totally surprised because

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17 Marx, 1978, p. 87.

18 "If wages are 4 Mark a day" and if "Labour, or more exactly, wage labour, can be used as such a measure of value". (von Bortkiewicz, 1952, pp. 6 and 5 respectively)

19 Marx, 1978, p. 88; "Sphere of Production I tries to get as much as Sphere of Production I" substitutes "instead of 72 centimes, rail transport takes only 25" in the original.

20 See footnote 18.



von Bortkiewicz is continuing to accurately mirror the perhaps more familiar Proudhon, for our particular notice at this point, in respect of Profit which turns up as a markup in Price-calculation, and Surplus Value as a surcharge in Value-calculation. In order to satisfy his assumptions, he has necessarily if deftly, depicted society as composed of one man. Such novelty has already been exhibited by Proudhon among many others -including von Bortkiewicz himself-, of whom Marx speaks in the following terms:

"To prove that all labour must leave a surplus, M. Proudhon personifies society; he turns it into a person-society -a society which is not by any means a society of persons, since it has its laws apart, which have nothing in common with the persons of which society is composed, and its 'own intelligence,' which is not the intelligence of common men, but an intelligence devoid of common sense." (Marx, 1978, pp. 83, 84)

Furthermore, Marx counselled Proudhon, in an attempt to prevent him in his forgetfulness, on how to deal with elementary arithmetic.

"Only, if we have any advice to give M. Proudhon, it is not to forget, in his Programme of the Progressive Association, to divide by 100. But alas! it is scarcely to be hoped that our advice will be listened to, for M. Proudhon is so delighted with his 'progressive' calculation, corresponding to the 'progressive association,' that he cries most emphatically:

"I have already shown in Chapter II, by the solution of the antinomy of value, that the advantage of every useful discovery is incomparably less for the inventor, whatever he may do, than for society. I have carried the demonstration in regard to this point to the rigour of mathematics!"  
(Marx, 1978, p. 88)

In this connection, it is possible that von Bortkiewicz, who surely must have been familiar with the text itself, specially when engaged "On the Correction of Marx's Fundamental Theoretical Construction in the Third Volume of Capital," <sup>21/</sup> has himself neglected to divide by 100? Presumably von Bortkiewicz -and anyone else who chooses to indulge in a "person-society"- must have turned a deaf ear to this advice from Marx to Proudhon.

Von Bortkiewicz is wide of the mark when he tells us that the rate of surplus value is 100 per cent while he has taken capital for percentage. Hence, a rate of surplus value of 100 per cent would unavoidably mean that necessary labour is equal to zero, as any

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21 1949; emphasis added.



schoolboy would understand <sup>22/</sup>. As for the Constant Capital it merely confirms that it is unnecessary -"For a strict logician like Bortkiewicz"<sup>23/</sup>. So much for Value-calculation. And if in the latter he gets rid of Variable Capital and Constant Capital taking one Sphere at a time, in Price-calculation he seems to have run out of patience -as he throws them out all at a stroke. Needless to say that without necessary labour there can be no surplus labour. Von Bortkiewicz's classic example, so often seen in print, turns out as a bogus bogey. Von Bortkiewicz, innocent of these observations, exclaims:

"We have thus proved  $\square!$  that we would involve ourselves in internal contradictions by deducing prices from values in the way in which this is done by Marx  $\square$  sic  $\square$ ." <sup>24/</sup>

While quite bizarre results have been reached by taking von Bortkiewicz's examples of the Spheres of Production presented in Tables I and 2, they have been reached by following his advice to "keep separate rigorously enough the two principles of value- and price-calculation." <sup>25/</sup> This does not stop him from asserting that:

22 "If  $\square$  The habit of representing surplus-value and value of labour-power as fractions of the value created -a habit that originates in the capitalist mode of production itself (leads to erroneous expressions, and if)  $\square$  they are to be treated as direct expressions of the degree of self-expansion of capital, the following erroneous law would hold: Surplus-labour or surplus value can never reach 100% ... Since the surplus-labour is only an aliquot part of the value created, the surplus-labour must necessarily be always less than the working-day, or the surplus value always less than the total value created. In order, however, to attain the ratio 100 : 100 they must be equal. In order that the surplus-labour may absorb the whole day (i.e., an average day of any week or year), the necessary labour must sink to zero. But if the necessary labour vanish, so too does the surplus-labour, since it is only a function of the former." (Marx, 1918, pp. 583 and 584; vide Chapter V section 5 supra)

23 Sweezy, 1949, p. xxvii.

24 1952, p. 9. "The trouble is that Marx went only half way in transforming values into prices. It need occasion no surprise that his procedure leads to contradictory results." (Sweezy, 1946, p. 115) Quite apart from empty repetitions, von Bortkiewicz simply sticks to Proudhon's tenets -he helpfully states them twice in his own work which a clarifying sleight of pen does not prevent our observing how himself connects this tenets: "the advantage of every useful discovery" -Proudhon disguised as Marx- "is incomparably less for the inventor" -von Bortkiewicz no less- "than for society", i.e. bourgeois society, judged by the succès fou by which Proudhon (under his fresh pseudonym von Bortkiewicz) is endlessly repeated.

25 1952, p. 8.

"We are thus driven to reject Marx's derivation of price and profit from value and surplus value."  
(von Bortkiewicz, 1952, p. 13) 26/

## 2. The dawn and twilight of direct labour

"What now follows belongs to classical antiquity. It is a poetical narrative intended to refresh the reader after the fatigue which the rigour of the preceding mathematical demonstrations must have caused him. M. Proudhon gives his person-society the name of Prometheus, whose high deeds he glorifies in these terms:

"First of all, Prometheus emerging from the bosom of nature awakes to life, in a delightful inertia,' etc., etc. 'Prometheus sets to work, and on this first day, the first day of the second creation, Prometheus' product, i.e., his wealth, his well-being, is equal to ten. On the second day, Prometheus divides his labour, and his product becomes equal to a hundred. On the third day and on each of the following days, Prometheus invents machines, discovers new utilities in bodies, new forces in nature . . . . With every step of his industrial activity, there is an increase in the number of his products, which marks an enhancement of happiness for him. And since, after all, to consume is for him to produce, it is clear that every day's consumption, using up only the product of the day before, leaves a surplus product for the next day.'"  
(Marx, 1978, pp. 90, 91)

Von Bortkiewicz has introduced us to a similarly inviting poetry of calculation, an exegesis of which reveals a sympathy with Proudhon -and implicitly his toiling hero- before our rigorous logician stands back and also urges the reader to do likewise, not only to better observe the panorama of the initial period of production, but to be in a position to witness the very plucking forth of this direct labour which is the priceless activity comprising the interest of this

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26 "[T]he mechanics of transforming values into prices [according to Marx's method] is unreasonable. Only one conclusion is possible, namely, that the Marxian method of transformation is logically unsatisfactory." (Sweezy, 1946, p. 115)

"Given Bortkiewicz's criticism and Marx's own unambiguous remarks, it is hard to maintain that Marx's solution to the transformation problem is correct as it stands in Volume III." (Gerstein, 1976, p. 271)

"The conclusion is, therefore, this: the logical succession that characterizes the procedure of Marx ( value - rate of profit - price ) cannot be maintained any more" (Napoleoni, 1976, p. 91)

"Bortkiewicz pointed out that, while Marx had certainly fallen into a mistake, this was due not to the intrinsic difficulty of the problem but rather to his inability to formulate the system of equations correctly." (Pasinetti, 1977, p. 23)

"Von Bortkiewicz is known as the economist who gave a correct solution to the Marxian problem of the 'transformation of values into prices!'" (Medio, 1972, p. 324)

worthy scene.

"To reach such a solution, it is advisable to reduce to wage outlays all of the outlays of all capitalists who took part in the production of a commodity. We shall present algebraically, from this point of view, first values and then prices." 27/

In order to emphasize his regressive advice (displace constant and variable capital by "direct labour"), he further states:

"Here [price-calculation] too, as in value-calculation, and for the same reasons, we need only to consider the case where constant capital -circulating as well as fixed- is in its turn exclusively the result [the exclusive product (ausschließliches Produkt)] of direct labour." 28/

Still immersed in his excavation of universal direct labour (a euphemism for our familiar Prometheus), he puts him -Prometheus-, down to work, by the same token, for one "(yearly)" period:

"We provisionally assume that total wages ( $A\lambda$ ) are paid at one moment of time.

This sum of wages forms one component of price. The other is the capitalist's gain or the profit. A turnover period of 1 year would make profit equal to  $\rho A\lambda$  (since  $\rho$  is the yearly rate of profit). Were the turnover period 2, 3 etc., years, profit would not be  $2\rho A\lambda$ ,  $3\rho A\lambda$  etc., but (because of compound interest)

$\{(1+\rho)^2 - 1\}A\lambda$ ,  $\{(1+\rho)^3 - 1\}A\lambda$  etc." 29/

Let von Bortkiewicz be adumbrated by Proudhon's assumptions.

"This Prometheus of M. Proudhon [30/], is a queer character, as weak in logic as in political economy. So long as Prometheus merely teaches us the division of labour [31/], the application of machinery [32/], the exploitation of natural forces and scientific power, multiplying the productive forces of men [33/] and giving a surplus compared with the produce of labour in isolation [34/], this new Prometheus has the misfortune of coming too late. But the moment Prometheus starts talking about production and consumption he becomes really ludicrous." (Marx, 1978, p. 91)

In turn, von Bortkiewicz has also spoken to us about production and consumption. At this point he found an incongruity in his model of Price-calculation. He claimed, in fact, that his "price

27 Von Bortkiewicz, 1952, p. 13.

28 Von Bortkiewicz, 1952, p. 18.

29 Von Bortkiewicz, 1952, p. 17.

30 -or von Bortkiewicz's direct labour-

31 -moreover, into V Spheres of Production duly accounted for, twice

32 removing the obstruction of Constant Capital

33 '(because of compound interest)'

34 'If wages are 4 Mark a day, the value of A would be 48 Mark, but the production of A would have required the capitalist to spend only 32 Mark on wages' (von Bortkiewicz, 1952, p. 6), while value is an 'index', moreover proportional to 'absolute value', -'Which is identical with the quantity of labour employed in its production'. (von Bortkiewicz, 1952, p. 5; emphasis added)



model breaks down".

Considering the fact that von Bortkiewicz has confused capital with percentage and that he has identified them with interested parties, let us see at what result we would arrive by following his assumptions.

He thoughtfully reminds us that in Value-calculation

"[S]pheres of production III and IV manufacture means of production, since the value of the goods concerned...coincides with the value of the constant capital used up...in all spheres of production." 35/

This coincidence is also to be found as he further erects a second admixture:

"[S]pheres of production I and V serve the production of subsistence goods for the workers, since the value of these goods...amounts to exactly as much as the wages received by the workers" 36/

And even a third reminder:

"The goods produced in sphere II, finally, would represent the consumption goods of the capitalist class, as the value of these goods...is equal [meaning identical] to the total surplus value." 37/

First, let us turn to Value-calculation. Von Bortkiewicz has told us that for it, Value-calculation, the consumption of means of production coincides with its production, that the "production of subsistence goods for the workers...amounts to exactly as much as the wages received by the workers" and that "The goods produced [for the capitalist class]... finally, would represent the consumption goods of the capitalist class".

Let us turn to Prometheus -or "direct labour" personified- in an attempt to find some clarification of these most extraordinary asseverations.

"To consume, for him, is to produce; he consumes the next [year] what he produced the [year] before, so that he is always one [year] in advance" 38/

As far as means of production are concerned, it would follow that what is consumed in the current year must have been produced the year before. A small difficulty arises with von

35 { von Bortkiewicz, 1952, p. 9; emphasis added }

36 { von Bortkiewicz, 1952, p. 9; emphasis added }

37 { von Bortkiewicz, 1952, p. 9; emphasis added }

38 (Marx, 1978, p. 91) In the case of Prometheus, (rectangular) parentheses substitute day for year; a milenium for Peter, a second for Paul.



Bortkiewicz, for without a first year how could he begin to make any calculations? But wait! In his identification of Value-calculation with Price-calculation, his calculations depend on this elusive First Year.<sup>39/</sup> Then, in this First Year, von Bortkiewicz must have produced in his person-society twice the means of production that will be consumed. Therefore, it would appear that production must be twice as great as consumption in any and all years. But whence such means of production if there was no constant capital, either fixed or circulating in von Bortkiewicz's First Year? Down goes Constant Capital in Value-calculation.

As we read in von Bortkiewicz, the consumption of "subsistence goods for the workers" is identical with their production. What the workers produce in one and only one turnover period,<sup>40/</sup> must have been produced the year before. In his example under consideration, in Table I there must be, as we have seen before, a "special case": no year before. Moreover, in such a primeval Year, his calculations require there to have been produced twice the amount of "subsistence goods for the workers" <sup>41/</sup>, for this such year and the following one

<sup>39</sup> Let us remember that in order to identify Value-calculation (which expands at a simple rate), and Price-calculation (expanding at a compound rate), he has informed us already that the turnover period of capital is one and only one, say year.  $q$  and  $r$  are their respective rates of "increase":

"If the turnover period were constant and equal to 1 year, then...  $q$  would equal  $r$ . In this special case, there would be no difference at all between value-calculation and price-calculation."  
(von Bortkiewicz, 1952, p. 21)

<sup>40</sup> This is an assumption for him in order to identify Value-calculation with Price-calculation:

"Thus, whilst the values of two commodities which embody the same amount of labour equal each other [expanding at a simple rate], this is not generally the case with the prices of such commodities [expanding at a compound rate], except on the condition that the turnover period should be identical for both commodities." (1952, p. 17)  
Hence, a railway running at a fixed constant speed ever and another railway speeding up at a compound rate, will swiftly merge at the end of one turnover period of time, which, moreover, appears to be the very point of destination for von Bortkiewicz himself. Following the train of ideas of this unbeatable thinker, at this stage both convoys nevertheless have cruised the same distance in one period of time. Fortunately enough, Professor von Bortkiewicz was not working in a railroad station. As is well known, he was engaged elsewhere.

<sup>41</sup> It is difficult to understand on what basis von Bortkiewicz can claim that the "production of subsistence goods for the workers... amounts to exactly as much as the wages received by the workers". This tautology -conflated with poor arithmetic- merely reveals its entire improbability.

since he operates one year in advance. It is not explained to us how it is that such "subsistence goods for the workers" could have been produced, while there were no means of production of any kind, nor any "goods for the workers," not even for subsistence, far less to produce at least twice what they would consume. Far from explaining anything, von Bortkiewicz simply cuts the ground from his own feet. This merely warns us that a fatuous hypothesis lies concealed under the label of "wages received by the workers". Down goes Variable Capital in Value-calculation.

While we have confirmed that in Value-calculation von Bortkiewicz's direct labour is a misrepresentation under which both "subsistence goods for the workers" and means of production conceal a fantasy, let us turn to "the consumption goods of the capitalist class", also in Value-calculation, as we continue examining the analogy with Proudhon.

"To consume, for him, is to produce; he consumes the next day [year] what he produced the day [year] before, so that he is always one [day, or year] in advance; this day [year] in advance is his 'surplus left by labour'. But, if he consumes one day [year] what he produced the day [year] before, he must, on the first day [year], which had no day [year] before, have done two days' [years!] work in order to be one day [year] in advance later on. How did Prometheus [or von Bortkiewicz in its turn speaking of direct labour] earn this surplus on the first day [year], when there was neither division of labour, nor machinery, nor even any knowledge of physical forces other than fire [or direct labour itself]? Thus the question, for all its being carried back 'to the first day [year] of the second creation,' has not advanced a single step forward. This way of explaining things savours both of Greek and of Hebrew, it is alone mystical and allegorical. It gives M. Proudhon a perfect right to say: 'I have proved by theory and by facts the principle that all labour must leave a surplus.'

The 'facts' are the famous progressive calculation, the theory is the myth of Prometheus." 42/ (Marx, 1978, p. 91)

As for von Bortkiewicz, he does not explain how it can be that the workers he is speaking about could have produced in such a Year twice the amount of "consumption goods of the capitalist class," in order to provide their "goods." Furthermore, it is not explained to us, however carefully we study his First Year, how surplus value was created in Value-calculation, in so far as there was neither

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42 "A surplus over and above the needs of immediate consumption is inevitable and necessary in all but the most primitive societies. Value theory merely reflects the particular form within capitalism, of this more general relation." (Pilling, 1972, p. 287)

means of subsistence for the workers nor means of production at their disposal, so that von Bortkiewicz could inevitably have proved his theory which leads the incredulous reader back to his Tables and his First Year for confirmation. In this way von Bortkiewicz has pre-empted surplus value and its rate, as he takes one for the other.

Von Bortkiewicz now begins his second leg of double accounting, Price-calculation, while his strabismus is duly fulfilled.

While for him to consume is to produce, what is consumed in means of production in the following year must have been produced the year before, so that he has always means of production one year in advance. But if he consumes one year the means of production he produced the year before, he must, on the First Year, which had no year before, have done two years' labour of means of production to be one year in advance later on. How did his direct labour produce this means of production on the First Year if it did not exist?

Down goes Constant Capital in Price-calculation.

As for von Bortkiewicz to consume is to produce, the consumption of subsistence goods for the workers is self-identical to its production. The following years' consumption would have been produced the year before, so that workers can always have means of subsistence in advance.<sup>43/</sup> But if they consume one year whatever means of consumption were produced the year before, they must, on the First year, which had no year before, have produced two years' labour of workers subsistence goods to be one year in advance later on. How did von Bortkiewicz's direct labour advance workers' subsistence goods in the First Year if there were not any? Down goes Variable Capital in Price-calculation.

In respect of capitalist's class consumption goods, to consume for it is to produce them, according to von Bortkiewicz. The capitalist class consumes next year what was produced for it the year before, so that it can always have means of consumption at its disposal in advance. But if it consumes one year what was produced the year before, the workers must on the First Year, which had no year before, have produced two years of capitalist's class consumption

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43 "Marx followed Ricardo in taking a turnover period of a year, so that the amount of the wage fund necessary to employ a man for a year is equal to the wage bill for a man year of work. But even then, it is not the same thing. The wage fund is a quantity of 'corn' in the barn after the harvest, and the wage bill is a flow of payments over the year." (Robinson & Eatwell, 1974, p. 33)



goods. How did von Bortkiewicz's direct labour produce capitalist's class consumption goods in the First Year if there were no workers' subsistence goods or means of production in Price-calculation? This was so obvious that von Bortkiewicz has forgotten to explain it to us.

To sum up. How did von Bortkiewicz's direct labour produce this "(yearly)" output when there was neither means of production, nor individual means of consumption for the workers, not even for the capitalist class, in Value-calculation? And furthermore, in Price-calculation? Von Bortkiewicz's double principles of calculation -alongside his direct labour, stand and fall together. As can be seen, von Bortkiewicz lacks foundation in speaking of any quantitative incongruity between value and price (of production).

While von Bortkiewicz has forgotten to reproduce Marx, he has simultaneously failed to prove anything in favour or against him too. Nevertheless, he continues his assault:

"Marx's error is a consequence of the fallacious method which he used for the transformation of values into prices." 44/

For the sake of clarity, let us express the content of von Bortkiewicz's Table I and Table 2, referring to Value-calculation and to Price-calculation accordingly. In them, we are depicting the outcome of his assumptions. While we have allowed ourselves to follow them, they incriminate him of number blindness.

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44 Von Bortkiewicz, 1952, p. 27.

"The drastic conclusion was therefore drawn that Marx's whole argument was mistaken." (Pasinetti, 1977, p. 23)

"When at last Vol. III appeared, there was no solution at all, but only dressed up in a rignmarole, the commonplace that prices cover costs of production including normal profits of the capital concerned." (Robinson, 1962, p. 39)



Table I : Value-calculation

Sphere of Production	Constant Capital	Variable Capital	Constant Capital used up	Surplus Value	Value	Rate of Profit
	(c)	(v)	( $\alpha c$ )	(m)	W	( $\frac{m}{c+v}$ )
I						
II						
III						
IV						
V						
I - V						

Table 2 : Price-calculation

Sphere of Produc tion	Con stant Cap ital	Var iable Cap ital	Constant Capital used up	Cost- price	Profit	Price	Divergence of Price from Value	Rate of Profit
	(c)	(v)	( $\alpha c$ )	( $\alpha c+v$ )	( $m'$ )	(P)	(P - W)	( $\frac{m}{c+v}$ )
I								
II								
III								
IV								
V								
I - V								

We have seen, moreover, that the humbleness of Proudhon speaking of "chemins de fer" <sup>45/</sup> undergoes a considerable élan effervescent enough to fit the "(yearly) output" in Table I and in Table 2, staged in a première by von Bortkiewicz and endlessly represented ever since.

The eloquence of Prometheus with all its amusing charm of Greek mythology in Monsieur Pierre Joseph Proudhon is to be duly encompassed forthwith by Professor Ladislaus von Bortkiewicz with his direct labour, as he joins the former surreptitiously to fulfil a moving pas de deux, while they are as admired as they are followed by a most numerous corps de ballet.

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45 Marx, 1978, p. 85 et seqq.

## CHAPTER IX

### FROM/INTO THREE DEPARTMENTS OF CONSUMPTION

#### I. A bucolic parody

Von Bortkiewicz has provided, so far, a lucid epitome of an erroneous procedure, as illustrated in the last chapter. In view of its unquestioned propagation, we have allowed ourselves to read it in the original -as we give P. J. Proudhon his due.

However, von Bortkiewicz has the particular ability of undertaking his endeavours twice, in order to ensure that every single one of his readers understands what he tries to convey. While we acknowledge his condescension towards us, we will have to consider him all the same. On this occasion, he will be, avowedly, correcting all those misdemeanours which he has so brilliantly derived from Marx.

To commence with, he provides a conspicuous survey of the whole affair:

"Critics of Marx have hitherto shown little inclination to examine more closely the procedure which is used in the third volume of Capital 1/ for the transformation of values into prices of production and for the determination of the average rate of profit, in order to see whether this procedure is free from contradictions.

1 Vol. III, pp. 182-203."  
(von Bortkiewicz, 1949, p. 199)

We will see, subsequently, how rigorous and consistent is von Bortkiewicz himself, who promises to surpass the already numerous predecessors in this task. We are confident that he will put an end to that superficial examination of Capital including Volume III, or particularly of Volume III, against which he so resolutely warns us.

Let us examine how von Bortkiewicz accomplishes again the representation of his argument.

"The different spheres of production from which Marx composes social production as a whole can be put together into three departments of production. In Department I means of production are produced, in Department II workers' consumption goods, and in Department III capitalists' consumption goods." (1949, p. 200)

Allowing Marx to analyse in his own words the "Reproduction and Circulation of Constant Capital as a Whole", what he does is decompose social production, into two main departments.<sup>1/</sup>

"II. The Two Departments of Social Production 2/

The total product, and therefore the total production, of society, is divided into two great sections:

I. Means of Production, commodities having a form in which they must, or at least may, pass into productive consumption.

II. Means of Consumption, commodities having a form in which they pass into the individual consumption of the capitalist and working classes.

In each of these two departments, all the various lines of production belonging to them form one single great line of production, the one that of the means of production, the other that of articles of consumption. The aggregate capital employed in each of these two departments of production constitutes a separate large department of the entire social capital."  
(Marx, 1915, p. 457)

Therefore, when Marx actually divides the social product, von Bortkiewicz explores the possibility that Marx composed it. And if the difference between decomposing and composing might appear exaggerated, close examination proves it is not. It is no less important, say, than the distinction between differentiation and integration.

We may even overlook for the moment, the fact that he expresses himself not in individual capitals nor in social capital. Moreover, we may also overlook for the time being, the fact that he expresses himself in "three departments of production." But that he can "put together" what is already social production as a whole, while he claims at the same time to sunder it, i.e. "into three

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1 In Capital, Vol. I, Marx has told us, this early, that the commodity -in so far as it is an external object- can take one of two forms, depending "how the object supplies human necessity, whether directly, as means of subsistence or an object of enjoyment, or in an indirect way, as a means of production." (1908, p. 1) This is preceded by the clarification that whether it takes the form of means of production or of subsistence, nevertheless,

"A commodity is firstly an external object, a thing which by means of its properties satisfies in some way or other, a human necessity." Hence, Marx is not referring to "goods" as we know already. He is telling us that every single commodity is classified either directly as means of enjoyment, or indirectly as means of production in its role of satisfying human needs. As we see there are no in-betweens or forms beyond. To draw an analogy from zoology, a mammal unavoidably has to be either a male or a female. What is von Bortkiewicz's original inspiration for this "third" department?

2 'Mainly from Manuscript II; the diagrams from Manuscript VIII.-F.E.'

departments of production" is a circumlocution that deserves to be suspected. In other words, for von Bortkiewicz "social production as a whole can be put together into three departments of production", while, simultaneously, it can be split asunder into three departments of production.<sup>3/</sup>

As for his aggregation into three departments of social production, von Bortkiewicz plays a neat verbal sleight of hand when he confuses "the different spheres of production", which on his analysis and helpful explication, emerges to have been composed of three and not decomposed in two. Where Marx decomposes, von Bortkiewicz claims to explore to actually fulfil a tautological composition <sup>4/</sup>.

The social capital as a whole is an integration of individual capitals. Each individual capital forms a link, a private and independent entity of social capital.<sup>5/</sup> What is difficult to understand is that the "different spheres of production" -and not the individual capitals- are to compose the social product. With a flick of his wrist, von Bortkiewicz does away with both individual capitals and capital in

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3 Lest the reader forget that consumption -for von Bortkiewicz- is tantamount to production, as he seduces the reader to even accept his lack of common sense, our acceptance of which permits him to drag us further into his mire, by showing us where our trust can lead us: exclusively consumption.

4 This is despite von Bortkiewicz's maintenance of polite appearances, by asserting that this is merely a possibility, that it "can be"; moreover into three and not two, as if he were in a hurry to speed up its disintegration. Everybody would agree that, say, the opposite of emptying water from a barrel is to fill it up. What is incomprehensible is that for our rigorous logician, doing one operation "can be" doing the other. So if we want to fill a barrel all we need to do is to empty it out! Fortunately, von Bortkiewicz was not an excise man, so it is left to the gentle reader how much does his "input-output" achievements hold; and is it barrels anyway or old wineskins?

5 "If we study 42/ the annual function of social capital -of the total capital whose fractional parts are the individual capitals, the movements of which are simultaneously their individual movements and links in the movements of the total capital- and its results, that is to say, if we study the product in commodities put forth by society during the year, then it must become apparent how the process of reproduction of the social capital proceeds, what characteristics distinguish this process of reproduction from that of an individual capital, and what characteristics are common to both.

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(42) From Manuscript II. F.E."  
(Marx, 1915, p. 453)



its entirety.<sup>6/</sup>

We have seen that von Bortkiewicz is not consistent, which is not surprising, perhaps, since he argues with his feet firmly planted on quick sand. Perhaps his commentation cannot be expected to be single-mindedly devoted to the quality of his ideas already expressed.

To recapitulate: when Marx proceeds to divide the global product, von Bortkiewicz claims that this unity of the global product "can be [is] put together", despite it still being Humpty-Dumpty safely on the wall. Subsequently, von Bortkiewicz tells us that while it is being "put together" (must not it then have been divided?), it is simultaneously "into...departments of production." Furthermore, this simultaneous composition-decomposition is integration-disintegration not of individual capitals, but of Spheres -or departments- of Production. It hardly bears the pointing out that both his procedures stand and fall together.

Von Bortkiewicz has told us -as far as he is concerned- that the spheres of production, as a whole, are to be put together into three departments of production. Before we consider in even greater detail this peculiar achievement of his, let us point out the constraint to which he explicitly subjects his argument.

"It is nevertheless interesting to show that Marx erred, and in that way, without reversing his way of posing the problem. For this purpose, it will be convenient, in order not to complicate the presentation, to introduce the same limiting assumption which Tugan-Baranowski made use of, namely, that the entire advanced capital (including the constant capital) turns over once a year and reappears again in the value or the price of the annual product 1/.

1 This assumption is also found, for example, in Kautsky, Karl Marx' ökonomische Lehren (Stuttgart, 1903), p. 98." (von Bortkiewicz, 1949, pp. 199, 200)

Once again, von Bortkiewicz speaks of the value of the annual product and of the price of the annual product, as if the "goods" in their entirety were sold twice in the market; once at their value, once at their price. But this delusive appearance simply confirms von Bortkiewicz's obstinacy in maintaining his

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<sup>6</sup> We are very much afraid that for this logically unbeatable thinker, capital is as spherical as the familiar Wittib Hurtig (better known for the English reader as Dame Quickly). Nevertheless, in spite of his ability, his obstinacy does not stop him from trying.

double accounting of the annual product.<sup>7/</sup>

Leaving aside von Bortkiewicz's duality of accounts, as we will come back to it, he omits to inform us what is it that constitutes the "entire advanced capital (including the constant capital)".

If von Bortkiewicz was to lecture on the entire advanced capital by claiming that in its entirety it comprises the whole of it, it would be agreed, even by the most uninformed pupil, that we have not advanced an inch. If he proceeds -experienced lecturer that he was- to say that a part of it, i.e., constant capital, is to be included in the whole, i.e., in the entire advanced capital, he would be imparting no knowledge whatsoever. This evasion might expose that he ignored what the advanced capital in fact is, and how it is determined -let alone expressed. His wisdom in this respect can be reduced to the following: constant capital, as a part, is to be included in the whole value (or price) of the annual product.<sup>8/</sup>

As if von Bortkiewicz was specially keen on his theoretical poverty, whatever the "entire advanced capital (including constant capital)" might amount to, it is to turn over and reappear elsewhere, in the value (or the price) of the annual product. This simply means that at the end of every year the entire production fund is to be depleted, as a fund, as it is to go as part of the annual product. In other words, the production fund is to appear and disappear every year; appear in the value of the annual product and disappear from the production fund -and vice versa, while all the advances would

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7 Against von Bortkiewicz's explicit resolution to engage in his system of calculation, i.e., as if the commodities were paid twice in the market, he could have saved himself such effort, long ago discarded even by the Physiocrats, as Marx points out:

"The value of commodities is expressed before their entry into circulation, instead of being the result of that entry(r).

r 'The contracting parties do not decide the price; that is fixed before they meet' (Le Trosne, l.c. p. 966)" (Marx, 1908, p. 119) Therefore, it is absurd to speak of the value of commodities which are to form the annual product while not referring to their price; as it is to speak of their price devoid of value. Von Bortkiewicz seems to be correcting not only Marx, but, forsooth, even the Physiocratic school.

8 But even in this is not very promising, as he has already confused one commodity for the aggregate of commodities, in each of his systems of calculation. Unable as he was to express them, he found it convenient to confuse them instead.

have to be annual.

"The workman is thus credited with the double miracle of producing the cotton, the spindles, the engine, the coal, the oil, etc., at the very same time as he is spinning by their aid, and also of converting one working day [or year] into [say] five working days [or years]; for we must bear in mind that in the case now under consideration four days are needed to produce the raw material and tools, and another day is required to turn the cotton into yarn. That the love of money leads men to an easy belief in such 'miracles,' and that sycophantic doctrinaires may always be found to prove them, is shown by the following incident, which is now a matter of history."  
(Marx, 1908, p. 183) 2/

9 "The problem is now dealt with in a more general way... We assume in the following... (d) that all capital goods have the same span of life, which is taken as unity, so that there are no fixed capital goods in the proper sense left over to the next period for further production after having been used in the current period;"  
(Morishima, 1973, p. 12)

Hence,

"Means of production are therefore used up during one production period." (Wolfstetter, 1973, p. 788)

So

"We assume that all capital invested is used up in each period of production." (Yaffe, 1975, p. 49)

As a result,

"we will assume that the whole constant capital is worn out in one period of production." (Koshimura, 1975, p. 11)

In other words,

"The value of a commodity when it leaves the enterprise is:

$V = c + v + s$ , 10/ with  $(c + v)$  being the capital advanced by the owner of capital and  $(s)$  the development of capital.

10 It is here assumed, abstractly, that the production of a single commodity implies consumption of all the constant capital."

(Godelier, 1972, pp. 227, 228)

Therefore,

"Let  $u$  be the total value of a commodity (or if aggregation is done, all commodities),  $c$  be constant capital (machines used up in one period which do not create a surplus but merely transmit their own value to the final product),  $v$  be variable capital (labour) and  $s$  be surplus value created by labour." (Mc Cormick et al., 1977, p. 428)

Thanks to a farsighted admonishment,

"It should be noted that Marx in his treatment of Prices of Production avoided the complication of a difference between the stock of fixed capital and the currently used-up part of it by the simplifying assumption that the whole of  $C$  is used-up in each 'turnover period' of production. This convention is followed here." (Dobb, 1955, p. 273)  
Unavoidably, the preceding incident ought to be re-created once again in the "time spent by workers" (Shaikh, 1977, p. 120) at greater length:

"If workers work only long enough to produce their means of subsistence and [to produce] the commodities necessary to replace the means of production used up, then the only final (net) outputs of the system are the means of subsistence. As such the total time put in by workers is the time directly required to produce the means of subsistence, plus the time directly required to replace the means of production used up in producing these means of subsistence. But the



Hence, the contrivance of taking the value of the product (c+v+s) for the value product (v+s) -a bulwark in von Bortkiewicz's allegations against Marx- becomes an article of faith. Further,

"It reveals the lamentable condition of the (so-called) economic science to bear in mind that neither Mr. Senior (for or for the case, von Bortkiewicz et al....) nor those who opposed him have ever yet been able to expose the obvious fallacies of the 'original discovery' as to the 'last hour.' They make an appeal to experience, 10/ while the why and wherefore escapes them altogether." (Marx, 1908, p. 188 n.)

Let us understand clearly that von Bortkiewicz has from the outset assumed proportionality, and that for him, to produce is to consume. Therefore, he is wide of the mark as he speaks of

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latter time is also the time indirectly required to produce the means of subsistence: hence the total time they work is the sum of the direct and indirect labor-time necessary to produce the means of subsistence -which of course is by definition the (labor) Value of these commodities, and hence the (labor) Value of the labor-power which is reproduced through their consumption.

Similarly, any surplus labor time they work over and above this necessary labor-time is the labor Value of the surplus-product, surplus-Value." (Shaikh, 1977, p. 138 n. 32)

In brief, the first "outputs" of the "total time put in by workers" are "to produce" the commodities necessary to replace the means of production used up; then the next "outputs" are to "produce their means of subsistence." And "Similarly, any surplus labor-time they work over and above this necessary labor-time i.e. the only very final (net) outputs of the system" is the labor Value of the surplus-product, surplus-Value."

By the way, von Bortkiewicz is shrewd enough to avail himself of Karl Kautsky, who explicitly says that

"As we assume that the total capital advanced is turned over in one year and appears in the value of the year's product, we shall now establish the following relation between the value and the price of the annual product of each one of the three undertaking/s, meaning individual capitals" (1925, pp. 87, 88)

As a result of spiriting away the constant capital, Kautsky could just arrive, earlier or later, at most erroneous results. Meanwhile, he has the brazenness of confusing the value product with the value of the product.

Indeed, Kautsky himself was not alone:

"Marx concern is with the value newly created within a period of production". (Hilferding, 1949, p. 160)

As an inference from this and

"To avoid complicating the calculation needlessly, we have assumed that c is entirely used up." (Hilferding, 1949, p. 160)

10 An appeal which, in the words of a Manchester spokesman -for instance- reads as follows:

"Nota Bene: the present type of argument has been examined, in various forms, by many different writers over the last 80 years. The same conclusions have always been reached and no logical flaw has ever been found in such arguments." (Steedman, 1977, p. 49 n.)



[D]epartments of production. Once he is committed to the pious duty of proving that the total consumption is proportional to total production, he is blinded by his ardour from seeing the revelation that in his work constant capital altogether does not exist:

"The phrase that the entire annual value in products must be ultimately paid by the consumer would be correct only in the case that we were to include in the term consumer two vastly different classes, namely individual consumers and productive consumers. But to say that one portion of the product must be consumed productively is precisely to say that it must serve as capital and cannot be consumed as revenue." (Marx, 1915, pp. 506, 507)

Once von Bortkiewicz takes production for consumption "(including the constant capital)" as an advance, this means excluding the constant capital, as it could not be consumed productively. It is empty words since there is no production process for him.<sup>11</sup> Apparently empty-minded, von Bortkiewicz gets rid -at the same time- of constant capital in deeds, while he holds on to it -in words:

"At the same time we shall assume that in the production of all three groups of means of production, that is, those which are used respectively in Departments I, II, and III -the organic composition of capital is the same." (von Bortkiewicz, 1949, p. 200)

If to produce means of production is to use them up, i.e. to advance means of production is tantamount to withdrawing them, then the existence and function of constant capital is precluded.<sup>12</sup>

11 "Winternitz' derivation is limited strictly to the relation between values and prices of production at an instant, actual prices and economic processes in time not being directly involved."

May's (1948, p. 598) lack of patience in referring to Winternitz is deplorable. He does not even have Senior's perseverance of referring to a day, not to mention a "(yearly)" period, as von Bortkiewicz's correction does. In commenting on Winternitz, his inability to draw explicit conclusions is matched by an apologetic outburst.

12 Von Bortkiewicz's sole and unique capital proves a formidable shelter from which to snipe at value as regulator of prices of commodities which are products of two or more capitals; a most ordinary attempt to bar its -value- very function:

"It is perfectly legitimate [!] to postulate a capitalist system [sic] in which the organic compositions of capital are everywhere equal [!] and hence the law of value does hold, and to examine the functioning [?!] of such a system."

(Sweezy, 1946, p. 70; emphasis added);

"In this case [of 'equal internal compositions of (constant) capitals'] every one of the departments happens to use the various raw materials and machine services in the same proportions that society produces them in toto." (Samuelson, 1971, p. 292)

Therefore,

In other words, von Bortkiewicz is telling us that in Departments I, II, and III, those means of production are used. Which ones? The ones that in Department I "are produced". If they are advanced, it is simply to keep up appearances.<sup>13/</sup>

Let us see whence "limiting assumptions" with which Tugan-Baranowski, von Bortkiewicz et al. gratify themselves.

"Adam Smith refuses to accept the logical outcome of his dissolution of the value of commodities, and therefore of the value of the annual product of social labor, into wages and surplus-value, or into mere revenue. This logical outcome would be that the entire annual product might be consumed in that case. It is never the original thinkers that draw the absurd conclusions. They leave that to the Says and Mac-Cullochs.

Say takes the matter indeed easy enough. That which is an advance of capital for one, is, or was, a revenue and net product for another. The difference between the gross and the net product is purely subjective, 'and thus the total value of all products in a society is divided as revenue.' (Say, Traité d'économie Politique, 1817, II, page 69.) 'The total value of every product is composed of the profits of the land owners, the capitalists, and the industrious people (wages figure here as profits des industriels!) who have contributed toward its production. This makes the revenue of society equal to the gross value produced, not equal to the net products of the soil, as was claimed by a sect of economists' (the physiocrats). (Page 63.)

Among others, Proudhon has appropriated this discovery of Say." (Marx, 1915, p. 451)

Once von Bortkiewicz has jettisoned constant capital, he can now assume, alongside the Says, the MacCullochs, Proudhons e tutti quanti that the total product is to be consumed as revenue -but also always maintaining explicitly a double accounting. Once he has got rid of means of production, he is left with but the means of consumption. Being thorough as well as rigorous, he has by the way disposed of the production process too.

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"We assume in the following... (a) that to each industry there is available one and only one method of production, so that there is no problem of 'choice of techniques';" (Morishima, 1973, p. 12)

So

"Let us now show that profits and surplus values are proportional throughout the economy, if and only if all industries have the same value-composition of capital." (Morishima, 1973, p. 74)

Ere

"Now if the rates of surplus value ( $s/v$ ) were the same in every industry, and if the organic composition of capital ( $c/v$ ) were the same in every industry, then it is easy to show that the rate of profit would be the same in every industry." (Hunt, 1978, p. 10)

13 This does not stop von Bortkiewicz from speaking of the organic composition of capital; which without any production fund is ostensibly meaningless. He finds himself discoverer of an inorganic decomposition of "means of production are produced".

To change the name does not change the item. Von Bortkiewicz relabels as "capitalists' consumption goods" what Say designated as profits of landlords. "Les profits des industriels" are tarted up into "workers' consumption goods"; the capitalists' gains undergo the industrious dictum of "means of production are produced".

Let us consider the peculiar procedure of having put "together" social production "into [i.e., from] three departments of production".

Leaving aside the vacuum with which von Bortkiewicz surrounds constant capital, let us observe that the production fund appears in one single department, i.e. "means of production are produced". At the same time, the consumption fund splinters into two distinct departments, namely "workers' consumption goods"; "capitalists' consumption goods".

When von Bortkiewicz speaks of the production fund, he comes out with one fund. But, as if he were committed to transgress his avowed proportionality, when he talks to us of the consumption fund, he suddenly speaks not of one, but of two departments, each of which presupposes a unique fund. All of a sudden, his proportionality is disproportionate.<sup>14/</sup>

He elaborates this disproportionality. When he refers to the point of production where the "means of production are produced", unity remains. However, as soon as he refers to the consumption fund, he champions a surprising sundrance: "capitalists' consumption goods" differ from identifiable "workers' consumption goods".

This most exquisite segregation allows us to consider in some detail. First, we will turn to the capitalists as depicted by von Bortkiewicz; both within their ambiguity as consumers of "goods" and in their relation to the "means of production [which] are produced" -at least in his writings. Finally, we shall be able to consider the workers in their sole role as consumers of "goods".

## 2. Le Petit Trianon

"In the face of the habitual mode of life of the old feudal nobility, which, as Hegel rightly says, "consists in consuming what is at hand," and more specially displays itself in the luxury of personal retainers, it was extremely important for the bourgeois economy to

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<sup>14</sup> This will not stop him from searching a presupposed equilibrium later on -while always keeping a double accounting.



promulgate the doctrine that accumulation of capital is the first duty of every citizen, and to preach without ceasing, that a man cannot accumulate, if he eats up all his revenue, instead of spending a good part of it in the acquisition of additional productive labourers, who bring in more than they cost. On the other hand the economists had to contend against the popular prejudice, that confuses capitalist production with hoarding, <sup>1/</sup> and fancies that accumulated wealth is either wealth that is rescued from being destroyed in its existing form, i.e. from being destroyed in its existing form, i.e. from being consumed, or wealth that is withdrawn from circulation.

<sup>1</sup> 'No political economist of the present day can by saving mean mere hoarding: and beyond this contracted and insufficient proceeding, no use of the term in reference to the national wealth can well be imagined, but that which must arise from a different application of what is saved, founded upon a real distinction between the different kinds of labour maintained by it.' (Malthus, l.c., pp. 38, 39.)"  
(Marx, 1918, p. 645)

As can be seen, von Bortkiewicz represents an elaborated admixture of the aristocratic prejudice that took upon itself the sacrifice of consuming all that came into existence, to be redistributed as revenue corresponding to consumption. At the same time, he pretends to depict a constant capital as wealth that was rescued from being consumed. In spite of being a modern economist, for him the production fund is constituted by mere hoarding. At the same time, he could not be the least worried about how much this his person-society needed to accumulate for its "Simple reproduction" purposes. This is why he assumes accumulation, while he is implicitly fabricating an identity between savings and accumulation.

The purpose of von Bortkiewicz assuming "Simple reproduction" is not just to present us with an obvious self-identity between accumulation and savings. The purpose of supposing necessitated "Simple reproduction" is to present "capitalists' consumption goods" as a revenue sprouting out of constant capital.

"It is only because his money constantly functions as capital that the economic guise of a capitalist attaches to a man. If, for instance, a sum of £100 has this year been converted into capital, and produced a surplus-value of £20, it must continue during next year, and subsequent years, to repeat the same operation. As a periodic increment of the capital advanced, or periodic fruit of capital in process, surplus-value acquires the form of a revenue flowing out of capital. <sup>1/</sup>

<sup>1</sup> 'Mais ces riches, qui consomment les produits du travail des autres, ne peuvent les obtenir que par des échanges (purchases of commodities.). S'ils donnent cependant leur richesse acquise



et accumulée en retrour contre ces produits nouveaux qui sont l'objet de leur fantaisie, ils semblent exposés à épuiser bientôt leur fonds de réserve, ils ne travaillent point, avons-nous dit, et ils ne peuvent même travailler; on croirait donc que chaque jour doit voir diminuer leurs vieilles richesses, et que lorsqu'il ne leur en restera plus, rien ne sera offert en échange aux ouvriers qui travaillent exclusivement pour eux... Mais dans l'ordre social, la richesse a acquis la propriété de se reproduire par le travail d'autrui, et sans que son propriétaire y concoure. La richesse, comme le travail, et par le travail, donne un fruit annuel qui peut être détruit chaque année sans que le riche en devienne plus pauvre. Ce fruit est le revenu qui naît du capital.' (Sismondi: Nouv. Princ. d'Econ. Pol., Paris, 1819. t. I. pp. 81-82.)" (Marx, 1918, p. 620)

So it is under the cloak of "Simple reproduction" that von Bortkiewicz presents us with an invariable and static account of capital, albeit confused with the interested parties and taken for a percentage, in order to display "capitalists' consumption goods" as an income flowing out of capital. Moreover, according to him, constant capital also yields surplus value. In his own words:

"If, as has already been remarked, the strict separation of variable and constant capital is intended to prevent the emergence of the idea that the material factor of production -and not the personal one- is the source of profit, then one might think that both forms of capital are equally situated with regard to their (alleged) productivity. After all, the gain of capital, whether surplus value or profit, derives, according to Marx, from labour and not from capital <sup>34</sup>/<sub>4</sub>."

<sup>34</sup> It is therefore just from the Marxian point of view that it is incorrect to say, as Marx occasionally does, that surplus value arises from the variable part of capital. Das Kapital, I, p. 414." (von Bortkiewicz, 1952, p. 23)

Hence, surplus value does not arise only from the "variable part" of capital. In consequence, it arises also from a "material factor of production", i.e. "constant capital [sic]" which is to be endowed with an alleged productivity by von Bortkiewicz himself. After all, capital is relabeled as "labour [sic]"<sup>15</sup>/<sub>5</sub>.

<sup>15</sup> "Since past labour always disguises itself as capital, i.e., since the passive of the labour of A, B, C, etc., takes the form of the active of the non-labourer X, bourgeois and political economists are full of praises of the services of dead and gone labour, which, according to the Scotch genius M'Culloch, ought to receive a special remuneration in the shape of interest, profit, etc. <sup>1</sup>/<sub>1</sub>"

<sup>1</sup> M'Culloch took out a patent for 'wages of past labour,' long before Senior did for 'wages of abstinence.'" (Marx, 1918, pp. 666, 667)

Leaving aside von Bortkiewicz's confusion between labour power and labour,<sup>16/</sup> we already know that he refers to constant capital for cosmetic purposes only. Under the appearance of providing a revenue and employing constant capital proportionately, it does not reproduce itself. It is not even produced. It is exclusively depicted as if the product were individually consumed, and not as being consumed productively.

Furthermore, von Bortkiewicz has artificially introduced "means of production are produced", whereas we have already shown that "In Department I means of production are [not only not] produced,"<sup>17/</sup> but that they do not even exist.

Moreover, he tries to seclude "capitalists' consumption goods" by a peculiar apartheid, i.e. Department III, with which he also surrounds himself by "natural" barriers.

"If to classical economy, the proletarian is but a machine for the production of surplus-value; on the other hand, the capitalist is in its eyes only a machine for the conversion of this surplus-value into additional capital. Political economy takes the historical function of the capitalist in bitter earnest. In order to charm out of his bosom the awful conflict between the desire for enjoyment and the chase after riches, Malthus, about the year 1820, advocated a division of labour, which assigns to the capitalist actually engaged in production, the business of accumulating, and to the other sharers in surplus-value, to the landlords, the place-men, the beneficed clergy, &c., the business of spending. It is of the highest importance, he says, 'to keep separate the passion for the expenditure and the passion for accumulation,'<sup>1/</sup> The capitalists having long been good liveries and men of the worlds uttered loud cries. What, exclaimed one of their spokesmen, a disciple of Ricardo, Mr. Malthus preaches high rents, heavy taxes, &c., so that the pressure of the spur may constantly be kept on the industrious by unproductive consumers! By all means, production, production on a constantly increasing scale, runs the shibboleth; but 'production will, by such a process, be far more curbed in than spurred on. Nor it is quite fair thus to maintain in idleness a number of persons, only to pinch others, who are likely, from their characters, if you can force them to work with success.'<sup>2/</sup> Unfair as he finds it to spur on the industrial capitalist, by depriving his bread of its butter, yet he thinks it necessary to reduce the labourer's wages to a minimum 'to keep him industrious.'

<sup>1</sup> Malthus, l.c., p. 319, 320.

<sup>2</sup> An Inquiry into those Principles respecting the Nature of Demand, &c., p. 67. (Marx, 1918, pp. 652, 653)

Once more, von Bortkiewicz accomplishes a syncretism. This

<sup>16</sup> As we have seen already, it is the use of labour power which is labour, for Marx.

<sup>17</sup> Von Bortkiewicz, 1949, p. 200.

time, both of Malthus and of this anonymous Ricardian. Let us see how he manages to agree with both, while he simultaneously differs from both of them.

While the process of "accumulation" is to express a mechanical identity concealing its lack of content, immediately after, he has opened an insulated department whereby the capitalist can engage in sheer consumption, spared any sort of remorse. Hence, it would appear that he is depicting an act of pure consumption. Once he gives way to the pure passion to spend, he restricts it to capitalists only.

Nevertheless, he is at pains to come to terms with the indignant mouthpiece of the capitalists who call for a modern crusade against the unproductive consumer.

While he happily pays tribute to the industrial capitalist, his consumption department, exclusively devoted to such capitalist, excludes any collaboration in its depletion. In consequence, fellow participants: landed aristocracy, bank capital, state and church dignataries, bureaucrats, alongside the rest of collaborators in the consumption of surplus-value are dismissed by decree <sup>18/</sup>.

Moreover, von Bortkiewicz does not instruct his followers whether a dole or even a parish relief is to be instituted to save the numerous flock, high and low, from starvation. It denotes infamous absence of primitive humanitarian feelings. It is as if his elegant triad was integrated by a most thrifty community. But, this is far

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18 However, he makes a fair exception with merchant capital, as he has turned beforehand to the Mercantilists to explain profit -upon alienation:

"Contrary to Marx, there can therefore also be no question of some theoretical results having subsequently proved that it would have been correct to deny commercial labour recognition as value-forming (productive), or, in other words, to ignore commercial labour in the determination of value."

(von Bortkiewicz, 1952, p. 60)

As for the "some theoretical results" they seem to be rather scarce -less than two-, as he informs us subsequently:

"In completion we may mention that it is not always easy to define where industrial labour ceases and commercial labour begins. See Ernest Lange, loc. cit., p. 554."

What a circuitous evasion in order to hint that the factory owner gets a profit in so far as he is "first and foremost" a trader, or as he is handling interest-bearing capital. While profit is explained on the basis of "turnovers," von Bortkiewicz restricts himself, at the most, to a hazy acquaintance of the two antideluvian forms of capital.



from being the case. Von Bortkiewicz has informed us that, in fact, the labour time employed in a sole commodity will be reflected proportionately in an index which he claims is its value. Following von Bortkiewicz' train of thought, all labour time spent ought to reflect value, and value would be a reflex of labour time <sup>19/</sup>.

"But original sin is at work everywhere. As capitalist production, accumulation, and wealth, become developed, the capitalist ceases to be the mere incarnation of capital. He has a fellow-feeling for his own Adam, and his education gradually enables him to smile at the rage for asceticism, as a mere prejudice of the old-fashioned miser." (Marx, 1918, p. 650)

In this respect, von Bortkiewicz comes to terms both with Walras -and the rareté that from the "good" he derives- and with sage Mac Culloch as far as the right reward of labour as reflected by the estimate of the labour that a "good" contains. As we can see, once von Bortkiewicz has denied the existence of constant capital, the capitalist himself is depicted as a buoyant and nonchalant consumer in his own right -and in his own uniqueness. Even at the risk -eventually- of being thought as if he was actively engaged -in production:

"Our friend, though just now swollen up with capitalist insolence, takes all at once the attitude of a simple workman. Has not he worked too? His work of inspecting and superintendence -have not these formed value? His manager and his overseer shrug their shoulders, for he has, meanwhile, with an evil smile, been springing one of his habitual mines upon these helpers. He jeers at us with his whole round of preachments, but for the lot he would not give a single farthing. He leaves the subterfuges, the hair-splitting arguments, to the political economists. They are paid for such things, which are their legitimate sphere. As for him, he is a practical man, and if he does not always pay great heed to what he says outside his factory, he keeps a close eye on what is done within it." (Marx, 1908, p. 152)

As we have seen, von Bortkiewicz's assumptions have, unfortunately, not a happy ending. As all the social product has to circulate in its entirety, and "reappears again in the value or the price of the annual product",<sup>20/</sup> he forgot to add that no capital

19 "The educated bourgeois and his mouthpiece are both so stupid that they measure the effect of every activity by its //411/ effect on the purse. On the other hand, they are so educated that they grant recognition even to functions and activities that have nothing to do with the production of wealth; and indeed they grant them recognition, because they too 'indirectly' increase, etc., their wealth, in a word, fulfil a 'useful' function for wealth." (Marx, 1969a, p. 288)

20 1949, p. 200.



can function as means of production.

The much vaunted "capitalists' consumption goods", a pastoral reminiscence itself, is just a veil to display a faint imitation duly repeated twice. Once in Value-calculation, and next in Price-calculation. The "capitalists' consumption goods" turned out to be a pious wish, as the conditions for their production are non-existent.

### 3. The supposed Labour Fund

Let us see how von Bortkiewicz refers now to what has been identified by him as the "real wage".

"For the sake of simplicity it is assumed that the capitalists advance consumption goods to their [capitalists' ?] workers in natura so that the workers take no direct part in commodity exchanges." (von Bortkiewicz, 1949, p. 212 n.)

Our modern economist is behind the times in his retrograde arrangement by which his workers receive their payment from the capitalists.<sup>21/</sup>

"The bourgeois economist whose narrow mind is unable to separate the form of appearance from the thing that appears, shuts his eyes to the fact, that it is but here and there on the face of the earth, that even now-a-days the labour-fund crops up in the form of capital. 1/

1 'The wages of labour are advanced by capitalists in the case of less than one fourth of the labourers of the earth.'  
(Rich. Jones: Textbook of Lectures on the Pol. Econ. of Nations. Hertford, 1852, p. 16.)

When von Bortkiewicz tell us that the worker gets his right portion of "goods" to consume from the capitalists, he is indulging in a regression which he confuses with capitalism. For von Bortkiewicz, therefore, no act of commodity exchange takes place whatsoever between the labourer and the capitalist, not even to start with. It would appear that the latter would have to snatch away from the labourer the surplus labour -instead of by means of commodity exchange-, so it can proceed as a class, to consume it. The prejudice of human equality had not yet entered in for von Bortkiewicz, as he tries to take the modern wage labourer for a serf -or even for a slave. This "simplicity" does not depict labour power as a commodity, which has value and use-value. Hence, the

<sup>21</sup> "Since corn took a year to produce workers were supported during the interval between sowing and reaping by advances of corn from a wage fund owned by capitalists." (Mc Cormick et al., p. 425)

capitalist is recast either as a feudal landlord, or as a slave owner, while profit upon alienation is to reign supreme. Nevertheless, the blurring of the differentia specifica between capitalism and former social formations reflects how much von Bortkiewicz knew about the subject-matter <sup>22/</sup>.

Another example will serve to examine further von Bortkiewicz's tired and overworked dogma.

"Let us take a peasant liable to do compulsory service for his lord. He works on his own land, with his own means of production, for, say, 3 days a week. The 3 other days he does forced work on the lord's domain. He constantly reproduces his own labour-fund, which never, in his case, takes the form of a money payment for his labour, advanced by another person. But in return, his unpaid forced labour for the lord, on its side, never acquires the character of voluntary paid labour. If one fine morning the lord appropriates to himself the land, the cattle, the seed, in a word, the means of production of this peasant, the latter will thenceforth be obliged to sell his labour-power to the lord. He will, caeteris paribus, labour 6 days a week as before, 3 for himself, 3 for his lord, who thenceforth becomes a wages-paying capitalist. As before, he will use up the means of production as means of production, and transfer their value to the product. As before, a definite portion of the product will be devoted to reproduction. But from the moment that the forced labour is changed into wage-labour, from that moment the labour-fund, which the peasant himself continues as before to produce and reproduce, takes the form of a capital advanced in the form of wages by the lord." (Marx, 1918, pp. 622, 623)

It is evident that the wages are not advanced in the form of means of consumption. What the capitalist advances to the labourer is the wages in the form of means of payment, i.e., sterling pounds; although this advance in time constitutes an assumption for clarifying purposes <sup>23/</sup>.

The purpose of our economic historian is not to dissert on the serfdom of the glebe. His expression in natura gives away his intention to discreetly confirm his tautology already put forward.

22 "Surplus value arises because the labor [should read: labor power] which is expended by workers in the process of production is larger than the labor necessary for the production of their subsistence fund." (Rubin, 1972, p. 236; emphasis added)

23 "The price of the labour-power is fixed by the contract, although it is not realised till later, like the rent of a house. The labour-power is sold, although it is only paid for at a later period. It will, therefore, be useful, for a clear comprehension of the relation of the parties, to assume provisionally, that the possessor of labour-power, on the occasion of each sale, immediately receives the price stipulated to be paid for it." (Marx, 1918, p. 194)

Namely, that the "production of subsistence goods for the workers... amounts to exactly as much as the wages received by the workers" <sup>24/</sup>. Substantially, this is to take the labourer for the means of subsistence he is to consume. We see how nicely he bundles "goods" and workers into the phrase "real wage," always maintaining a double calculation.

Even if he has not confused the value of the means of subsistence with the labourer himself, he has destroyed, nevertheless, the source of surplus value.

If the worker receives in the form of "real wage" the value of his "consumption goods" for as much materialized labour as he is giving back to the capitalist in the form of immediate labour, it is impossible for the capitalist to squeeze out a profit, not to mention surplus value.

Moreover, if, for the sake of "simplicity" the capitalist pays directly to the labourer articles of consumption in the form of products -instead of buying and paying x sterling pounds for the workers' capacity to labour, there would be no sterling pounds flowing back to the capitalist, as he has not thrown any amount of money whatsoever into circulation. It is difficult to understand how the capitalist can even recuperate his advances in natura, let alone enrich himself.

To deny that the labourer sells his labour power, and to claim that what he sells is his labour, sweeps away surplus value itself. Again, it exposes a quid pro quo between the wage labourer and the feudal serf, etc., as mentioned earlier. Further, it piously suggests that all labourers are capitalists, because they are constantly in a position to sell "themselves" <sup>25/</sup>.

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24 Von Bortkiewicz, 1952, p. 9. Thus,

"y denotes the quantity of labor needed to replace the 'variable capital,' defined as the stock of wage goods advanced for the maintenance of the workers;" (Pasinetti, 1977, p. 19)

In other words,

"The wage-goods are commodities the specificity of which is that they must be advanced to the workers for them to work (an n dimensional space).

We call wage the quantity of wage-goods (a vector defined in the wage-goods space)." (Benetti et al., 1975, p. 83)

25 "However, those who work are owners of themselves and what they sell is only their labour power." (Wolfstetter, 1973, p. 794)

The reference to "labour power", here, is just to save appearances. He confirms this as he refuses next to regard the labourer as free to sell



"The fact that a man is continually compelled to sell his labor-power (himself) to another man proves to the apologetic economists that he is a capitalist, for lo! he is continually selling his 'commodity,' himself. In that case, a slave is also a capitalist, although he is sold by another for once and all as a commodity, for the nature of this commodity, a laboring slave, has the peculiarity that its buyer does not only make it work every new day, but also provides it with the food which enables it to do ever new work." (Marx, 1915, p. 512)

Von Bortkiewicz has refused so far, to tell us how much money the capitalist advances to the labourer in order to buy his labour power at its value. Instead, with his own brand of genuine simplicity, he righteously fixes it rather posthumously just as the "goods" are to be consumed.<sup>26/</sup> As far as von Bortkiewicz is concerned, any advance of capital proper is banned. There is no production process taking place either, so there can be no reproduction of any kind. In brief, all that our rigorous logician has done, is to take the subsistence goods for the workers, for the wages received by the workers -to use his own words. And as if this were not clear enough, he adds that this takes place with proportionality and in kind.

It is not only that von Bortkiewicz gets rid of the value of labour power. He has also disposed of the value of the rest of the commodities, which are expressed, as everyone knows, in its money form, vulgo price.

What would happen if the capacity to labour is not alienated,<sup>27/</sup> is pointed out by Marx. He tells us what would happen if

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his labour power:

"They [those who work] sell it to those who monopolise the means of production as private property (capitalists) and, as labour power is their only property, they are forced to sell it. To complete the stylised picture, production is organised by independent firms and therefore presumes the purchase of labour as well as of means of production." (Wolfstetter, 1973, pp. 794. 795)

This author drops his guard as he ends up claiming that what the labourer has been "forced to sell" is his "labour".

26 "Under capitalist commodity production labour power itself is a commodity and (in contrast to Marx) we assume that this particular commodity is paid after its use, at the end of the production period." (Wolfstetter, 1973, p. 789)

27 "Up to this point we have considered men in only one economical capacity, that of owners of commodities, a capacity in which they appropriate the produce of the labour of others, by alienating that of their own labour. Hence, for one commodity owner to meet with another who has money, it is necessary, either that the product of labour of the latter person, the buyer, should be in itself money, should be gold, the material of which money consists, or that his



we were to refuse the process of valuation of labour power.

"That is extraordinarily cheap sentimentalism which regards as rude and uncouth the fixing of the value of labour-power by causes arising from the very nature of things, and which cries -as Rossi does- 'The conception of the power of labour as the abstraction of the means of subsistence of the labourers while the work of production proceeds, is a reasonable thing. To speak of labour, and of labour-power, is equivalent to speaking of the labourer and his means of living -the workman and his wages'(k).

He who speaks of labour-power does not speak of labour, any more than he who talks of the power of digestion talks of digestion itself. To perform the operation of digestion, as everybody knows something is wanted besides a good stomach. He who speaks of labour-power does not talk in the abstract of the means necessary for support; on the contrary, their value is expressed by its value. It is of no use to the labourer unless it is sold, and instead of glorifying it he will regard it as a cruel natural necessity that his labour-power, which has already required a certain quantity of the means of subsistence for its production, demands that those means shall be constantly renewed for its reproduction. He will then find out, with Sismondi, that 'labour-power .... unless it is sold, is nothing'(l)

k Rossi, Cours de l'Econ. Polit., Brussels, 1842, p. 370

l Sismondi, Nouv. Princ. &c., v. I., p. 112.

Von Bortkiewicz refrains from the valuation of labour power, while he speaks at the same time of a "real wage," of "goods to their [capitalists'] workers in natura". Or whatever amounts to the by now often repeated, "market basket of goods" <sup>28/</sup>.

In reckoning his accounts, considered in the last chapter, our profound thinker omits referring to a starting point.<sup>29/</sup> Instead, we were driven inexorably by questioning his assumptions, back to nil. Meanwhile, the contradiction between capital and labour was felicitously replaced by the locution "direct labour". But this contradiction, this divorce,

"The separation of labour from its product, of subjective labour-power from the objective conditions of labour, was therefore the

product should already have changed its skin and have stripped off its original form of a useful object.

(Marx, 1918, p. 122)

28 "We must also assume that the minimum-subsistence budget is a market basket of goods that comes in those same relative proportions as the goods are used as inputs in production. (This is because a subsistence-wage theory is somehow assuming that the labor supply itself is, as it were, produced by a further department not all that different from other departments." (Samuelson, 1971, p. 292)

29 It is beyond imagination how individuals, or groups of individuals, can buy without having, beforehand, proceeded to engage in selling.

real foundation in fact, and the starting point of capitalist production." 30/;

of the capitalist production process.

While von Bortkiewicz spares himself the effort of considering the capitalist production process at all -except for the unexplained act of the prime "(yearly)" creation-, this does not stop him from identifying the portion of individual consumption of the wage labourer with the fraction of which it forms part in the commodity product. It totally escapes him that they are two entirely different phenomena.

"The labourer consumes in a twofold way. While producing he consumes by his labour the means of production, and converts them into products with a higher value than that of the capital advanced. This is his productive consumption. It is at the same time consumption of his labour-power by the capitalist who bought it. On the other hand, the labourer turns the money paid to him for his labour-power, into means of subsistence: this is his individual consumption. The labourer's productive consumption, and his individual consumption, are therefore totally distinct. In the former, he acts as the motive power of capital, and belongs to the capitalist. In the latter, he belongs to himself, and performs his necessary vital functions outside the process of production. The result of the one is, that the capitalist lives; of the other, that the labourer lives."  
(Marx, 1918, pp. 625, 626)

Von Bortkiewicz has denied the act of productive consumption by exposing his ignorance of it. All that he expects the worker to do is perform individual consumption of "goods," taking care to keep this at least in a right proportion. Or even better "more exactly" as von Bortkiewicz prepare to exercise his double standards on these consumed goods whose amount does not change whatever the modifier. In order to confirm himself, he seeks to lull us with the assurances which are merely an inversion of his tautology -that the "real wage" is self-same with the means of subsistence for the workers.

His pretension is to pass off the labourer as a means of production who does not, by the by, happen to engage in the production process. In his place, we see a consuming automaton where once stood the living subject that consumes individually in order to consume productively, while satisfying his vital needs.<sup>31/</sup>

30 Marx, 1918, pp. 624, 625.

31 Von Bortkiewicz not only commits, invariably, the same practical joke implicit in A. Smith, by taking labouring cattle -including the oxen- for wage labourers; and the food consumed by the former for

While productive consumption has been merrily ignored, the source of surplus value is, as we have seen, destroyed. In spite of the difficulties, von Bortkiewicz soldiers on replacing individual consumption by a percentage ratio. Let us quote Marx to consider in its entirety the role of individual consumption in relation to wage labour:

"The matter takes quite another aspect, when we contemplate, not the single capitalist, and the single labourer, but the capitalist class and the labouring class, not an isolated process of production, but capitalist production in full swing, and on its actual social scale. By converting part of his capital into labour-power, the capitalist augments the value of his entire capital. He kills two birds with one stone. He profits, not only by what he receives from, but by what he gives to, the labourer. The capital given in exchange for labour-power is converted into necessities, by the consumption of which the muscles, nerves, bones, and brains of existing labourers are reproduced, and new labourers are begotten. Within the limits of what is strictly necessary, the individual consumption of the working class is, therefore, the reconversion of the means of subsistence given by capital in exchange for labour-power, into fresh labour-power at the disposal of capital for exploitation. It is the production and reproduction of that means of production so indispensable to the capitalist: the labourer himself. The individual consumption of the labourer, whether it proceed within the workshop or outside it, whether it be part of the process of production or not, forms therefore a factor of the production and reproduction of capital; just as cleaning machinery does, whether it be done while the machinery is working or while it is standing. The fact that the labourer consumes his means of subsistence for his own purposes, and not to please the capitalist, has no bearing on the matter. The consumption of food by a beast of burden is none the less a

their "wages". (Marx, 1915, p. 430). At the same time, it would appear that in his own person-society, our subtle logician restricts himself to reflecting his own point of view "for the sake of simplicity". And in his procedure he corroborates himself by reducing every "good" to "direct labour." Wassily Leontieff, by the way, disserts against the "nonexistence" of the "original factors of production" in the following manner:

"Should, let us say, the price of 'horse labor' increase in relation to the costs connected with the operation of a tractor, the farmer would substitute tractors for horses. The demand for horses would decrease. If horses were able and willing [!] to exist on smaller hay ratios the postulated price discrepancy would disappear and they would find complete employment at a lower level of 'forage rates'. Otherwise serious unemployment [of horses] appears to be inevitable. Put the word 'workers' instead of 'horses,' 'wage rates' instead of 'forage rates,' and 'entrepreneur' instead of 'farmer' and you have an accurate statement of the problem [of the mutual interrelation of 'industries', and the substitution of machinery for labor] and its solution."

(1938, p. 77; emphasis added)



necessary factor in the process of production, because the beast enjoys what it eats. The maintenance and reproduction of the working-class is, and must ever be, a necessary condition to the reproduction of capital. But the capitalist may safely leave its fulfillment to the labourer's instincts of self-preservation and of propagation. All the capitalist cares for, is to reduce the labourer's individual consumption as far as possible to what is strictly necessary, and he is far away from imitating those brutal South Americans, who force their labourers to take the more substantial, rather than the less substantial, kind of food. 1/

1 'The labourers in the mines of S. America, whose daily task (the heaviest perhaps in the worlds) consists in bringing to the surface on their shoulders a load of metal weighing from 180 to 200 pounds, from a depth of 450 feet, live on bread and beans only; they themselves would prefer the bread alone for food, but their masters, who have found that the men cannot work so hard on bread, treat them like horses, and compel them to eat beans; beans, however, are relatively much richer in bone-earth (phosphate of lime) than is bread' (Liebig, l.c., vol. 1, p. 194 note)."  
(Marx, 1918, pp. 626, 627)

Here we see in South America in miserable human detail of what von Bortkiewicz presents to us in his antiseptic model in which the labourer is forced to consume -in the form of a "real wage" -the means of subsistence that the model requires and designates as most "advantageous" form.

Marx clarifies that vulgar economists can only see individual consumption. In the same breath, judgements are advanced to the effect that surplus value is unproductive consumption. Presumably in order to "maximize" variable capital it would be necessary to "minimize" the individual consumption of each labourer -while constant capital has already been eliminated so it cannot emerge now disguised as a percentage. As we know, percentage ratios were the only quantities with which our egregious statistician had any sort of acquaintance.

Let us see the destruction -and confusion of vulgar economics as far as productive consumption is concerned.

"Hence both the capitalist and his ideological representative, the political economist, consider that part alone of the labourer's individual consumption to be productive, which is requisite for the perpetuation of the class, and which therefore must take place in order that the capitalist may have labour-power to consume; what the labourer consumes for his own pleasure beyond that part, is unproductive consumption. 1/ If the accumulation of capital were to cause a rise of wages and an increase in the labourer's consumption, unaccompanied by the increase in the consumption of labour-power by capital, the additional capital would be consumed unproductively. 2/ In reality, the individual



consumption of the labourer is unproductive as regards himself, for it reproduces nothing but the needy individual; it is productive to the capitalist and the State, since it is the production of the power that creates their wealth. 3/

1 James Mill, l.c., p. 238.

2 'If the price of labour should rise so high that, notwithstanding the increase of capital, no more could be employed, I should say that such increase of capital would be still unproductively consumed.' (Ricardo, l.c., p. 163)

3 'The only productive consumption, properly so-called, is the consumption or destruction of wealth' (he alludes to the means of production) 'by the capitalists with a view to reproduction... The workman... is a productive consumer to the person who employs him, and to the State, but not strictly speaking, to himself.' (Malthus' Definitions, &c., p. 30.)" (Marx, 1918, pp. 627, 628)

From the above, we see how for the economist individual consumption of the worker is the only productive element of the labourer, the consumption of his "real wage" or "wage bundle".

Von Bortkiewicz is telling us that the remainder, i.e., what is not "workers' consumption goods" is "capitalists' consumption goods".

Thereby, von Bortkiewicz displays, without doubt, a consumption fund for the capitalist, and a consumption fund for the workers, which he calls "departments". As we know, they are not departments of social production, but of individual (and isolated) consumption within his own person-society. As for Department I, "where means of production are produced" it is advanced in order to keep up appearances -as exposed supra-ere his whole model vanishes.

The tautology between "real wage" and "workers' consumption goods" is treated, specifically, by Marx. It presupposes one unvarying quantity of capital (which has undergone "consumption or destruction of wealth" to use Malthus' words), alongside proportionality between the unvarying quantity of capital and the commodity product.<sup>32/</sup> Should this premise be upheld, variable capital would

<sup>32</sup> "We make the usual assumption that the stock of accumulated capital can be taken as given in the short run." (Klein, 1968, p. 134n.) And

"We may finally round out this system by stating the Marxian proposition that the ratio between surplus value and total wage payments is constant. This is the familiar constant rate of surplus value, an institutional constant of the system. 11/

11 A rational explanation of this institutional constant can easily be given. If the technological production function is of linear-logarithmic type used in the derivation of the Keynesian system

be depicted, next, as an immutable part of the whole.

"The dogma [to conceive social capital as a fixed magnitude of a fixed degree of efficacy] was used by Bentham himself, as well as by Malthus, James Mill, M'Culloch, etc., for an apologetic purpose, and especially in order to represent one part of capital, namely, variable capital, or that part convertible into labour-power, as a fixed magnitude. The material of variable capital, i.e., the mass of the means of subsistence it represents for the labourer, or the so-called labour fund, was fabled as a separate part of social wealth, fixed by natural laws and unchangeable. To set in motion the part of social wealth which is to function as constant capital, or, to express it in a material form, as means of production, a definite mass of living labour is required. This mass is given technologically. But neither is the number of labourers required to render fluid this mass of labour power given (it changes with the degree of exploitation of the individual labour-power), nor is the price of this labour-power given, but only its minimum limit, which is moreover very variable. The facts that lie at the bottom of this dogma are these: on the one hand, the labourer has no right to interfere in the division of social wealth into means of enjoyment for the non-labourer and means of production. <sup>1/</sup> On the other hand, only in favourable and exceptional cases, has he the power to enlarge the so-called labour-fund at the expense of the 'revenue' of the wealthy.

<sup>1</sup> John Stuart Mill, in his Principles of Political Economy, says: 'The really exhausting and the really repulsive labours instead of being better paid than others, are almost invariably paid the worst of all... The more revolting the occupation, the more certain it is to receive the minimum of remuneration... The hardships and the earnings, instead of being directly proportional, as in any just arrangements of society they would be, are generally in an inverse ratio to one another.' To avoid misunderstanding, let me say that although men like John Stuart Mill are to blame for the contradiction between their traditional economic dogmas and their modern tendencies,

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given in the appendix, then a constant ratio between wages and profits follows by maximizing surplus value subject to the technological constraint. In this formulation, total output is net of the terms in Marx's constant capital -depreciation and raw materials. Total output is defined as net national income."

(Klein, 1968, p. 133)

Also,

"We assume in the following... (a) that to each industry there is available one and only one method of production, so that there is no problem of 'choice of techniques';" (Morishima, 1973, p. 12)

Again,

"a) in each industry, we have at our disposal but one sole method of production in such a way that the problem of 'choice of techniques' is not posed; each technique having moreover constant returns".

(Abraham-Frois & Berrebi, 1976, pp. 13, 14)

And again,

"There are constant returns to scale, and, for each industry there is only one way of transforming resources into products so that there is no problem of choice of techniques." (Hatziprokopiou, 1975, p. 531)

it would be very wrong to class them with the herd of vulgar economic apologists." (Marx, 1918, pp. 668, 669)

Von Bortkiewicz takes the means of subsistence of the workers for the value to the capitalist of using such fluid mass of labour power. Because he has independently presupposed proportionality, he ends up depicting the familiar person-society, and risks recanting his own deeds.

Because von Bortkiewicz expresses the identity of the "labour fund," both with "real wages" and with "workers' subsistence goods", he finds himself in agreement with Professor Fawcett et al.:

"What silly tautology results from the attempt to represent the capitalistic limits of the labour-fund as its natural and social limits may be seen, e.g., in Professor Fawcett. 2/ 'The circulating capital of a country,' he says, 'is its wage-fund. Hence, if we desire to calculate the average money wages received by each labourer, we have simply to divide the amount of this capital by the number of the labouring population.' 3/ That is to say we first add together the individual wages actually paid, and then we affirm that the sum thus obtained, forms the total value of the 'labour-fund' determined and vouchsafed to us by God and Nature. Lastly, we divide the sum thus obtained by the number of labourers to find out again how much may come to each on the average. An uncommonly knowing dodge this.

2 H. Fawcett, Professor of Political Economy at Cambridge, The Economic Position of the British Labourer, London, 1865, p. 120.

3 I must here remind the reader that the categories, 'variable and constant capital,' were first used by me. Political Economy since the time of Adam Smith has confusedly mixed up the essential distinctions involved out of the process of circulation, of fixed and circulating capital. For further details on this point, see Book II., Part II." (Marx, 1918, pp. 669, 670)

Von Bortkiewicz, for his part, takes peculiar care not to apply his theory of the person-society to Britain or to any other country for that matter. He is satisfied with having erected a "natural barrier" for the individual capitalist in his vagabond person-society.

Without having the faintest idea about what the variable capital is, he has the daring and resolute ingenuity to make out of it a constant and invariable portion of the product. The "capitalists' consumption goods" (otherwise "surplus left by labour") is adroitly removed from any annual circulation, as it is allocated by von Bortkiewicz to Department III. As for the constant capital, due to his "limiting assumptions" which he reflects and pleads, it is replaced by "circulating capital", i.e., is made to circulate fully once a "year"; just to expose that it is a fabrication of the labour



fund itself, as we saw before. Hence, von Bortkiewicz's insights coincide with Professor Fawcett, both speaking to us of a sole wage rate. A most ingenious equalitarian device, as hypnotic as it is meaningless.

However, the "average wage" is merely a confirmation of his exercise on apologetics which—in spite of Adam Smith and Ricardo—has not yet found a way to equalize the various products of value furnished by different labourers.

In quest of proportionality, von Bortkiewicz has to rub out constant capital: it was a hindrance to him. Not only outstripping Marx with this manoeuvre, he outshines even the classical political economists, whose discipline he aspires to abolish.

As for Prof. Fawcett we see how he had discovered—among others—the "labour fund" latent in England. He devises an allocation of the most advantageous nature for the, thereby, fortunate "average-wage-labourer." How flexible, not to say malleable, this right to fair-shares allocation is, is made clear by Marx:

"It did not prevent Mr. Fawcett saying in the same breath: 'The aggregate wealth which is annually saved in England, is divided into two portions; one portion is employed as capital to maintain our industry, and the other portion is exported to foreign countries..... Only a portion, and perhaps, not a large portion of the wealth which is annually saved in this country, is invested in our own industry.' 2/

The greater part of the yearly accruing surplus-product, embezzled, because abstracted without return of an equivalent, from the English labourer, is thus used as capital, not in England, but in foreign countries. But with the additional capital thus exported, a part of the 'labour-fund' invented by God and by Bentham is also exported. 3/

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2 Fawcett, l.c. pp. 122, 123.

3 It might be said that not only capital, but also labourers, in the shape of emigrants, are annually exported from England. In the text, however, there is no question of the peculium of the emigrants, who are in great part not labourers. The sons of farmers make up a great part of them. The additional capital annually transported abroad to be put out at interest is in much greater proportion to the annual accumulation than the yearly emigration is to the yearly increase of population."  
(Marx, 1918, p. 670)

As we see, Prof. Fawcett's presupposed proportionality between the "labour fund" and the output, collapses as soon as he referred to an actual case, i.e., England, where Marx exposes how well the vaunted "proportionality" was maintained. In respect of the above mentioned England, Marx observed that the share of capital



exports overseas (as a fraction of the capital accumulation taken as a whole every year) was far from being proportional with the share of the population expelled out of the country as emigrants (as part of the annual population growth).

Von Bortkiewicz has been specifically careful not to make any reference to the actual process of capitalist production. Capitalism or any other mode of production is not percentage ratios, proportionality, a person-society. Not even the three together.

Von Bortkiewicz has supplanted capitalism and its inherent contradictions with a most harmonious model which appears ready made. It is endowed with a labour fund provided by Bentham, among others. In it, the labourer -who has actually been eliminated from the distribution as an instrumentum vocale at best- is presented as sharing proportionally with the capitalist, through a feat of individual consumption.

The contradiction between capital and labour is deftly hidden, in order to present a hymn of "general (economic) equilibrium", which at the most can muffle any conflict or a cacophony of numéraires. This is why the harmonicists enjoy the full gusto of finding -or pretending to find-compatibility between what they spied as a discrepancy in need of their attention.

In the end, whenever all this occurs, there remains an endless argument about how revenue would be distributed in an "optimum mode" <sup>33/</sup>. Utopian socialists were and bourgeois economists are always enmeshed in futile attempts to "correct" these injustices, even before 1789.

Minor obliterations are in order to render obvious the morality of economics, according to the tenets revamped by von Bortkiewicz, glorified by his disciples, modern masters of the "three departments" which dispose of capital, of money, and of value.

"Insofar as it is a question of demonstrating  $\angle$  of proving (nach-

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<sup>33</sup> How worn out are these global and redundant efforts, can be judged by Marx observations:

"The learned disputation, how the booty pumped out of the labourer may be divided, with most advantage to accumulation, between the industrial capitalist and the rich idler, was hushed in face of the revolution of July."

(Marx, 1918, p. 653)

It looks as if von Bortkiewicz was concerned with a "Simple re-production" of this enlightened controversy, fashionable in more than one ancien régime.

weisen) / Marx's errors it is quite unobjectionable to work with limiting assumptions of this kind, since what does not hold in the special case [?!] cannot claim general validity [?!]."  
(von Bortkiewicz, 1949, p. 200)

## CHAPTER X

### PROCRUSTES' LABOURS LOST

#### I. An attempt to barter away harmonies

We have seen that von Bortkiewicz presupposes proportionality in all his work. Because of this, it is necessary that the mass of capital is "one", and has an immutable degree of action. Furthermore, far from analysing under what conditions supply and demand can coincide under capitalism, identity is presupposed in an arbitrary manner. Once this ossified identification has been slipped over, the competition in the marketplace already rendered unnecessary is now ignored. Competition is beyond the limiting assumptions of von Bortkiewicz's person-society.

Let us see how von Bortkiewicz adheres to his own peculiar notation -which we have had the opportunity to look at in the second part- albeit replacing it with Marx's.

Despite using a second set of notation, it looks as if he is not going to offer anything but the same old formulae. But let us not step ahead of him but keep pace with our strict logician.

"Finally, we shall assume 'simple reproduction.'

Let  $c_1, c_2, c_3$  stand for the constant capital,  $v_1, v_2, v_3$  for the variable capital, and  $s_1, s_2, s_3$  for the surplus value in Departments I, II, and III respectively. The conditions of simple reproduction are expressed in the following system of equations:

$$(I) \quad c_1 + v_1 + s_1 = c_1 + c_2 + c_3$$

$$(2) \quad c_2 + v_2 + s_2 = v_1 + v_2 + v_3$$

$$(3) \quad c_3 + v_3 + s_3 = s_1 + s_2 + s_3$$

"

(von Bortkiewicz, 1949, p. 200) 1/

<sup>1</sup> "There are various equations throughout Marx's writings, but these equations are mainly definitions. They state, for example, that total output can be broken up into three components: constant capital, variable capital, and surplus value."

(Klein, 1947, pp. 154, 155; emphasis added)

Hence, it is a matter of course not only to take an empty identity for an equation, but further, to impute it to Marx. Klein repeats it else-

We can see that von Bortkiewicz repeats his multiple calculations.

For a start, he considers two types of simple reproduction, which fit well with his previous procedures. There is one with inverted commas, the one he fails to explain, which we have already considered. And there is the other, without inverted commas, and also without a single word of explanation.<sup>2/</sup>

However, he does supply us with three different "equations" that "can [are] put together [by him] into" one self-contained (and apparently differentiated) system.

These three "equations," couched in his inventive brand of algebra, could be restated in plain words as follows:

The quantity of means of production, the quantity of the workers' consumption "goods," the quantity of the capitalists' consumption "goods" are the only source of the quantity of means of production, the quantity of workers' consumption "goods," the quantity of the capitalists' consumption "goods."

He does not let the reader in on whether the above system refers to Value-calculation. Nor whether, were that be the case, the same would hold true for Price-calculation. However, at least we know for certain that we are sharing an intrinsically satisfying calculation thanks to its being composed mainly of "goods." And it would certainly be incorrect to suggest that we have found nothing in (1), (2), (3), above. On the contrary, we find his mindful confirmation of his previous procedure, which surely cannot be without significance.

"Nothing is more silly than the dogma according to which circulation necessarily implies the equilibrium of sales and purchases, seeing that every sale is a purchase, and vice versa. If it simply means that the number of sales actually

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where, under a different guise:

"Constant capital plus variable capital plus surplus value is equal to the value of total output." (Klein, 1968, p. 131)

2 Nevertheless, he could have spared himself the effort of speaking of simple reproduction, simply because reproduction on an extended scale is pre-empted by his assumptions. As we know, all the "goods" are to be distributed and consumed. Due to his obliterating their production, to speak of their reproduction, is an act of notable bravado.



effected equals the number of purchases, it is nothing more than a tautological platitude. But what it pretends to prove, is that the seller leads his own buyer to market."  
(Marx, 1908, pp. 76, 77)

Can von Bortkiewicz really be re-confirming a sterile circle? Are these circumlocutions performed without even a farthing? Marx continues his discussion:

"Sale and purchase are an identical act, as being the reciprocal relation of two persons polarically opposed, the possessor of the commodity and the possessor of the money. As acts of the same person, sale and purchase constitute two acts polarically opposed. The identity of sale and purchase entails the consequence that the commodity becomes useless; if once thrown into the alchemist's crucible of circulation, it does not come thence as money. If one does not buy, the other cannot sell. This identity supposes, moreover, that the success of the transaction constitutes a resting-point, an intermediate stage, which may endure for a greater or less time, in the life of the commodity." (1908, p. 77)

Von Bortkiewicz persists in assuming that the exchange not only ought to take place in a redundant form, but that it must take place "at one time", however specified: its static character confirms its redundancy: there can, under this regime, be no interruption in the "instantaneous," as it were, life of the commodity.

Because for von Bortkiewicz the putative exchange act is fixed in an "absolute" moment and bereft of measurement, it is difficult to calculate an interruption in his exchange act. Is as if the commodities had to exchange en masse and at no determined period of time.

So his system does expose the sterility of his exercise, and his consummate skill is confirmed in a repetition, which he no less, transposes.

It is nearly impossible to imagine a market where purchases and sales take place without the intromission of money. But such a feat of imagination was not beyond von Bortkiewicz. For he exposes his depth of understanding of the commodity by referring to them with no apparent memory of what this must imply about the existence of money.

Can he really have imagined such an Arcadian mart or could this be a blind spot nourished by the overall needs of his system?

"When one commodity replaces another, the money commodity always sticks to the hands of some third person. 1/ Circulation sweats

1 Self-evident as this may be, it is nevertheless for the most part unobserved by political economists, and especially by the 'Freetrader Vulgaris.'

money from every pore." (Marx, 1918, p. 127)

The system of three "equations" put forward by von Bortkiewicz has two peculiar characteristics.<sup>3/</sup> First, it bears the proposition that every seller effects its own buyer, and viceversa. Secondly, all the "goods" are exchanged in the form of barter. Marx is not unfamiliar with such peculiar procedures. He systematizes them distinctively.

"See my observations on James Mill in 'Critique, &c.,' p.123-125. With regard to this subject, we may notice two methods characteristic of apologetic economy. The first is the identification of the circulation of commodities with the direct barter of products, by simple abstraction from their points of difference; the second is, the attempt to explain away the contradictions of capitalist production, by reducing the relations between the persons engaged in that mode of production, to the simple relations arising out of the circulation of commodities. The production and

<sup>3</sup> For the dilation of three "equations" see May (1948, p. 598), who observes through Winternitz this already implicit eventuality:

"With respect to Winternitz' mathematical derivation, it should be noted that his method is independent not only of the conditions of simple reproduction (as he correctly points out) but also of the context of the division of the economy into three branches. The derivation may be interpreted as an example, for the case  $n = 3$ , of the way in which values and prices of production of the  $n$  commodities in the economy are related."

May avoids specification of the division of the economy into "three branches", as a dexterous device to take  $(n)$  branches for  $(n)$  commodities -or vice versa. Hence, Seton (1957), likewise claims that "It can be shown, however, that the most general  $n$ -fold subdivision of the economy, in which each product may be distributed among several or all possible uses is equally acceptable -and easily handled- as a premiss for the required proof  $\square$  of the general consistency and determinacy of the problem  $\square$ . 1/

<sup>1</sup> Mr. K. May (Economic Journal, Dec. 1948) has preceded me in pointing to the hidden generality of the traditional solutions." (p. 150)

In his confusion, Seton goes on to speak of a "hidden generality" while he is simply attempting to handle -or to overhandle- a peculiar special case devoid of generality. It is not only that Seton assumes what he had to prove, i.e., "The Principle of Equal Profitability" (p. 149) from "this system of 'value' flows" (p. 151). Further, he sets down to "determine the absolute prices  $\square$  sic  $\square$  (as opposed to price ratios)  $\square$  sic  $\square$  ... chosen from quite a variety of alternatives  $\square$  !  $\square$ ." (p. 152)

It did not take him long to discover that "from quite a variety of alternatives" which he calls also the "invariance postulate", it happens that

"However, there does not seem to be an objective basis for choosing any particular invariance postulate in preference to all the others, and to that extent the transformation problem may be said to fall short of complete determinacy." (p. 153)

circulation of commodities are, however, phenomena that occur to a greater or less extent in modes of production the most diverse. If we are acquainted with nothing but the abstract categories of circulation, which are common to all these modes of production, we cannot possibly know anything of the specific points of difference of those modes, nor pronounce any judgement upon them. In no science is such a big fuss made with commonplace truisms as in political economy. For instance, J. B. Say sets himself up a judge of crises, because, forsooth, he knows that a commodity is a product." (Marx, 1918, p. 128 n. 1)

If J. B. Say could pass judgement on crisis as a fait accompli, why should not von Bortkiewicz surround himself with platitudes and further spread them incessantly? <sup>4/</sup> Encircled as he is with the black cassocks of the scholastic system, whose harmony might provide as much inspiration as insulation, it is hardly surprising that the culmination of his felicitous device is to pre-empt crises. An harmonious "direct exchange" of "direct consumption" and "direct labour" is transposed into a tautology. Hence (1), (2), (3).

In summary, von Bortkiewicz exhibits a sui generis ability to express the value of commodities in "other" than their money form, <sup>5/</sup> vulgo price. His wisdom is clearly acknowledged by Marx.

"Any man knows, even if he knows scarcely anything else, that commodities have a value-form which contrasts in a striking degree with their varied forms as Use-values -namely, their money-form." (Marx, 1908, p. 14)

So far as we have seen, von Bortkiewicz refuses to refer to the commodity in respect to what is common to it qua commodity.

In relation to the first point, i.e., direct exchange or barter, Marx warns us against all economic visionaries:

"Commodities are never exchanged or compared with others by their possessors without being exchanged and compared as values by those possessors with one single, third species of commodity. In becoming the equivalent of other commodities this third species immediately acquires, albeit within narrow limits, the general or social equivalent form. This general form is born and dies with the transient social contact which called into being, and attaches itself rapidly in turns first to one commodity and then

<sup>4</sup> In a proud emulation of emptiness, Wolfstetter makes a brief pause in order to realize his own achievements:

"So far we have analysed social production without even mentioning what type of society we refer to: let us now turn to a particular mode of social production, capitalist production." (1973, p. 794)

<sup>5</sup> While advancing and handling his "equations", he has done so without yet introducing explicitly his "good serving as a measure of value and of price." (von Bortkiewicz, 1952, p. 10)



to another. As soon as exchange has reached a certain development this form attaches itself exclusively to one special kind of commodity, and crystallises itself under the money form." (1908, p. 53)

It is not surprising that von Bortkiewicz fails to let us know the nearest market where we can see his system -or systems- at work. Should any doubts persist concerning von Bortkiewicz's wistful incubations on barter in the marketplace, Marx reminds us of the relation between the duration of labour and the money form.

"But the measure of values by money is the form which ought necessarily to invest their inherent measure, the duration of labour". (1908, p. 58)

It becomes increasingly difficult to grasp how von Bortkiewicz could manage to perpetuate his consuetudinary strabismus, to refer to commodities expressed in money sometimes, and in the next otherwise. He is either a thaumaturge, or he is devoid of common sense. Is von Bortkiewicz claiming independent existence for the duration of labour -or labour time- and its necessary manifestation: money?

We are dealing with a retort which does not distil money, neither is its gleaming side blazoned with metric or imperial magnitudes. All we find are indexes devoid of denomination. The value of "goods," however pure, is in these conditions sheer indeterminacy.

Without commodities being first expressed in their money form,<sup>6/</sup> it is impossible for them to be circulated. In other words, money is the vehicle of commodity circulation as it serves, also, as the measure of value on which, as we have already pointed out, circulation depends. A belief that commodities can circulate without their being so expressed, reduces the exercise to a purely ideal form, moreover irrelevant.

## 2. Proportionality by abduction

Let us take von Bortkiewicz's word and regard his three "equations" as a system.

The value (or the price) of the annual product amounts to

$$\sum_{i=1}^3 c_i + \sum_{i=1}^3 v_i + \sum_{i=1}^3 s_i$$

On the other hand, the (price of the) value product created in that year amounts to

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<sup>6</sup> "The commodity that functions as a measure of value, and, either in its own person or by a representative, as the medium of circulation, is money." (Marx, 1918, p. 146)



$$\sum_{i=1}^3 c_i + \sum_{i=1}^3 v_i + \sum_{i=1}^3 s_i$$

Therefore, according to von Bortkiewicz, the annual product of value corresponds to the value created in that year, as they attain the ratio 100 : 100. But if the value created in that year is tantamount to the annual product, "the entire advanced capital (including the constant capital)"<sup>7/</sup> would be reduced to nought. To claim that the entire advanced capital "reappears in the value or price of the annual product" is an ostensible absurdity.

Meanwhile, all the annual product would have to be created in that year. However, without the advance of means of production and purchased labour power represented by constant and variable capital respectively, it is difficult to understand how "the value or the price of the annual product" would have been created at all <sup>8/</sup>.

Let us forget for the moment where conclusions of his system would lead us and simply return to his argument.

We left him just after he advanced the unwieldy palindrome depicted in (1), (2), and (3) -yet one system. Next, he argues that

"If we now designate the rate of surplus value by  $r$ , then we have

$$r = \frac{s_1}{v_1} = \frac{s_2}{v_2} = \frac{s_3}{v_3}$$

and equations (1), (2), and (3) can be rewritten as follows:

$$(4) \quad c_1 + (1+r)v_1 = c_1 + c_2 + c_3$$

$$(5) \quad c_2 + (1+r)v_2 = v_1 + v_2 + v_3$$

$$(6) \quad c_3 + (1+r)v_3 = s_1 + s_2 + s_3$$

The problem is now to convert these value expressions into price expressions which conform to the law of the equal rate of profit." (von Bortkiewicz, 1949, pp. 200, 201) <sup>9/</sup>

Von Bortkiewicz sets out proudly to reach Price-calculation as a conversion from Value-calculation. This is most peculiar as he himself confirms the redundancy of Price-calculation, which he imputes to Marx:

"However, instead of drawing the only appropriate conclusion, namely that the whole construction of prices is useless, Marx tries, in the second half of the above quotation / Das Kapital, III, pp.

<sup>7</sup> Emphasis added.

<sup>8</sup> "The label of a system differs from that of other articles, among other things, by the fact that it cheats not only the buyer, but often also the seller." (Marx, 1915, p. 415)

<sup>9</sup> Indeed, we adhere to Sweezy's (1949) trans. notation in representing numeral one as I.

139-140], to rescue the sense and meaning of this [price] construction by two arguments: firstly that the divergences of prices from values compensate each other; and secondly, that the capitalist economy is a field in which strict laws never have an indisputed validity." (von Bortkiewicz, 1952, p. 10; emphasis added)

Therefore, <sup>10/</sup> it is incoherent of von Bortkiewicz to

10 A parallel confinement -or rebuttal- of the price form in Marx is found in Hilferding (1949):

"In striking contrast with Böhm-Bawerk, Marx looks upon on the theory of value, not as the means for ascertaining prices, but as the means of discovering the laws of motion of capitalist society." (p. 139)

Or, in Lange (1935):

"In a capitalist economy it requires, as Marx has shown himself in the third volume of Das Kapital, certain modifications due to differences in the organic composition of capital (i.e. the ratio of the capital invested in capital goods to the capital invested in payment of wages) in different industries. Thus the labour theory of value has no qualities which would make it, from the Marxist point of view, superior to the modern more elaborate theory of economic equilibrium... It is only a more primitive form of the latter, restricted to the narrow field of pure competition and even not without its limitations in this field... Further, its most relevant statement (i.e. the quantity of price to average cost plus 'normal' profit) is included in the modern theory of economic equilibrium. Thus the labour theory of value cannot possibly be the source of superiority of Marxian over 'bourgeois' economics in explaining the phenomena of economic evolution. In fact, the adherence to an antiquated form of the theory of economic equilibrium is the cause of the inferiority of Marxian economics in many fields.

"That Marxian economics fails is due to the labour theory of value, which can explain prices only as equilibrium prices (i.e. 'natural prices' in the terminology of Ricardo). Deviations of actual from 'natural prices' are more or less accidental and the labour theory has nothing definite to say about them." (pp. 77, 78, 79)

Or, in Robinson (1962):

"Like the others, he [Marx] felt obliged to offer a theory of relative prices, but though he thought it essential we can see that it is irrelevant to the main point of his argument." (pp. 34, 35),

Or in Gerstein (1976):

"In simplest terms the transformation problem arises from the fact that while in Volume I Marx treats commodities as if they exchange at prices equal to their exchange values, it turns out that this is incompatible with the formation of a general rate of profit. 21/

21 Some thorny problems of interpretation crop up when we try to maintain a correct understanding of value and still follow Marx's own arguments. I have argued that Marx's theory is, in principle, not a theory of price, but at best of price changes. Yet it seems to be necessary to refer to commodities exchanging at their values. Probably a better language is needed, perhaps more mathematical. In the absence of this development the special and restricted meaning of statements such as that in the text above must be kept in mind. Part of the problem cannot be overcome since it lies in Marx's method. Volume I refers to a (nonexistent) world of production considered abstractly. This is not a model, that is, an approximation

present himself as vindicating the "sense and meaning" of a useless price construction, viz., Price-calculation.

It is ostensible that von Bortkiewicz is riddled with confusions. Further, he could not consider a single act of exchange on its own, as (4), (5), and (6) suggest every single act of exchange. Besides, as he attempts to depict the preceding act, expressing capital advanced, with the subsequent one representing the commodity product, he cannot avoid confusing them. Further, he makes a quid pro quo between an individual exchange for relations among classes socially determined. Marx warns us against this.

"Hence, if the production of commodities, or a transaction belonging to it, is to be judged by its own economic laws, we must consider each act of exchange by itself, outside of all connection with the act of exchange preceding it and following it. And since purchases and sales are transacted between individuals, it will not do to seek therein relations between entire classes of society." (Marx, 1918, p. 643)

Furthermore, in depicting the source of surplus-value, von Bortkiewicz forgets that addition is not multiplication,<sup>11/</sup> moreover of percentages. We might expect common arithmetic sense to obviate this, but not so in the case of bourgeois economists.

Unfortunately, von Bortkiewicz is somewhat forgetful. He did not remember that in each expression, namely (4), (5), and (6), every single share is a component of the whole, while the whole resolves itself into its own parts. In other words, the three shares that comprise each Department, are at the same time the three shares into which each Department is decomposed. It is difficult to over-

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to reality which will later be corrected. Volume I deals with production because it is the dominant  $\int$ (nonexistent)? $\int$  structure. Nevertheless, the categories used refer to circulation, and moreover, will change meaning when circulation is introduced explicitly." (p. 261)

11 " $\int$ I/n adding them  $\int$  the constituent elements of the product, or which comes to the same thing, in buying factors of the labour process  $\int$  they are not multiplied (cc).

cc Upon this proposition the physiocrats have for the most part based their doctrine of the unproductiveness of all non-agricultural labour, and it is irrefutable for economists -of a sort. 'This fashion of imputing to one thing the value of several (for example, to cloth the product of weaving), of laying, so to speak, stratum upon stratum, several values on one, makes the latter so much more... The term addition shows very well the manner of forming the prices of the result of workmanship: the price is only the total of several values added up; but to add is not to multiply' (Mercier de la Rivière, l.c., p. 599)". (Marx, 1908, p. 150)



look this endless chain of circumlocutions he purports in front of us, <sup>12/</sup> in the guise of exposing Marx. It is more difficult not to realize that in each of his expressions, von Bortkiewicz is referring solely to percentages, i.e. merely to indexes <sup>13/</sup> in the pretence of expressing capital values.

Devoid of any logical scruple, von Bortkiewicz goes on in each of (4), (5), and (6) to claim that the indexes in their entirety are to represent variable capital. At the same time and in addition, the entirety of mere indexes or percentages are to represent what he calls surplus value (i.e. once again the entirety of capital in the form of variable capital, multiplied by a markup). That is to say,

$$(4)' \quad c_1 + Iv_1 + rIv_1 = c_1 + c_2 + c_3$$

$$(5)' \quad c_2 + Iv_2 + rIv_2 = v_1 + v_2 + v_3$$

$$(6)' \quad c_3 + Iv_3 + rIv_3 = s_1 + s_2 + s_3$$

Von Bortkiewicz's dicta are even devoid of common sense. In so far as the aggregation of indexes cannot be greater than the whole of them, if variable capital is to depict the entirety of capital, namely  $Iv_i$  ( $i=1, 2, 3$ ), then

$$c_i = 0 \quad (i = 1, 2, 3)$$

$r$  not only becomes an implausibility. It would be sheer absurdity <sup>14/</sup>. As  $v_i$  ( $i=1, 2, 3$ ), each on its own, is to depict the "whole", it reduces any other part to nought. Therefore, expression (4)' would take the following shape:

$$(4)'' \quad Iv_1 = c_1 + c_2 + c_3$$

12 "The complete Marxian system may now be expressed as follows:

Consumption depends upon wages and upon surplus value.

Investment depends upon surplus value and upon accumulated capital.

Wages are proportional to surplus value.

National income is equal to the sum of consumption and investment.

National income is equal to the sum of wages and surplus value."

(Klein, 1968, p. 133)

13 "value is merely the index of an exchange relationship"

(von Bortkiewicz, 1952, p. 5)

14 To seal his ignorance for posterity, von Bortkiewicz has exposed number blindness, as he has discovered that the whole, i.e. (4)', (5)', (6)', can be greater than the whole itself, i.e.  $Iv_i$  ( $i=1, 2, 3$ ).



Likewise, (5)' would result in

$$(5)'' \quad Iv_2 = Iv_2$$

In the same manner, (6)' would lead to

$$(6)'' \quad Iv_3 = s_1 + s_2 + s_3$$

Were (4)'', (5)'', and (6)'' to be taken as a system, then

$$(4)''' \quad Iv_1 = 0$$

$$(5)''' \quad Iv_2 = Iv_2$$

$$(6)''' \quad Iv_3 = 0$$

simply confirming that the constant capital has been implicitly sublimated long ago. Von Bortkiewicz is quite able to enhance and further manipulate "the 'labour-fund' invented by God and Bentham"<sup>15/</sup> with glorious results.

Having exhausted our digression on this enlightening plethora of limiting assumptions demanded -and supplied by von Bortkiewicz, let us turn again where we left him. He was contemplating how to convert (4), (5), and (6), i.e. "value expressions" into "price expressions". We return to his argument, as we leave apart where the implicit conclusions of this system have lead us.

"The correct transition from value quantities to price quantities can be worked out as follows:

Suppose that the relation between the price and the value of the products of Department I is (on the average) as  $x$  to  $I$ , in the case of Department II as  $y$  to  $I$ , in the case of Department III as  $z$  to  $I$ . Furthermore, let  $q$  be the profit rate which is common to all departments (though now formula (I0)  $\sqrt[16]{\phantom{x}}$  can no longer be regarded as the correct expression for  $q$ ).

The counterpart of equations (4), (5), and (6) is now the following system:

$$(II) \quad (I+q)(c_1x + v_1y) = (c_1 + c_2 + c_3)x$$

$$(I2) \quad (I+q)(c_2x + v_2y) = (v_1 + v_2 + v_3)y$$

$$(I3) \quad (I+q)(c_3x + v_3y) = (s_1 + s_2 + s_3)z$$

<sup>15</sup> Marx, 1918, p. 670.

<sup>16</sup> (I0)  $q = S/(C+V)$ , depicting in von Bortkiewicz, percentage ratios. We are disregarding here that he speaks here of an average of products in Department I, while it boils down, as a whole, to one single "good". Likewise for Department II and III, taken separately.

In this manner we obtain three equations with four unknowns (x, y, z, and  $\rho$ ).\" (von Bortkiewicz, 1949, pp. 201, 202) 17/

It does not need much acuity to notice that von Bortkiewicz's words do not correspond to his symbols. Were we to follow his prescribed suppositions whereby \"the relation between the price and the value of the products of Department I is (on the average) as x to I,\" etc., we would get the following Value-calculation:

$$(4)\text{bis} \quad c_1x + (I+r)v_1y = (c_1 + c_2 + c_3)x$$

$$(5)\text{bis} \quad c_2x + (I+r)v_2y = (v_1 + v_2 + v_3)y$$

$$(6)\text{bis} \quad c_3x + (I+r)v_3y = (s_1 + s_2 + s_3)z$$

which happens to be missing in von Bortkiewicz. These last three \"equations\" are simply a derived form of the initial Value-calculation depicted by him in (4), (5), and (6).

As for Price-calculation, in (II), (I2) and (I3) he is advancing a derived form of Price-calculation, whose initial configuration is

$$(II)\text{bis} \quad (I+\rho)(c_1 + v_1) = c_1 + c_2 + c_3$$

$$(I2)\text{bis} \quad (I+\rho)(c_2 + v_2) = v_1 + v_2 + v_3$$

$$(I3)\text{bis} \quad (I+\rho)(c_3 + v_3) = s_1 + s_2 + s_3$$

Von Bortkiewicz is deceiving his attentive readers when he claims he is converting (or posing the transition from) the system of Value-calculation -whether the initial or the derived one- into that of Price-calculation -be it in its derived or in its initial form.

If value is supplanted by one entire, complete, self-contained, whole &c., system or principle of calculation; if price is to undergo the same fate; it would not be possible for us to recalculate one into the other, nor even to explain how is it that it takes place in the actual process of competition among different capitals corresponding to the diversity of branches of industry. In spite of keeping the name of transition, von Bortkiewicz exposes, however, that he is upholding dual systems, each devoid of

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17 \"It is enough to say that Bortkiewicz constructed a determinate equational system (in which the number of unknowns was no more than the number of equations) from Marx's conditions of equilibrium as set out in part III of the second volume of Capital and so arrived at a formally satisfactory solution\" (Kidron, 1968, p. 71)

denomination and thoroughly unrelated <sup>18/</sup>. Hence, Value- and Price-calculation, each of which constitutes the most pristine set of ambiguities, do brandish their purporter as a most vacuous platitudinarian. The above reveals the flourishing of strabismus -and even blindness- in order to uphold or further vulgarize these consecrated sophisms.

We ought to acknowledge the sagacity von Bortkiewicz displays when an initial Value-calculation [say, (4), (5), (6)] could yield a derived Value-calculation [say, (4)bis, (5)bis, (6)bis]. But what about Price-calculation? Needless to add that in order to "keep separate rigorously enough the two principles of value- and price-calculation"<sup>19/</sup> it is to be thoroughly disregarded. Hence, a triplicity [say, (A)] would be reached:

- (A.i) initial Value-calculation;
- (A.ii) Value-calculation derived;
- (A.iii) unrelated Price-calculation.

In an upside-down seesaw, the above mentioned triplicity is posed as containing an initial Price-calculation [say, (II)bis, (I2)bis (I3)bis], and a Price-calculation to be derived from it [say (II), (I2), (I3)]. This is what von Bortkiewicz is actually posing (see last quote). In this eventuality, the triplicity [say, (B)] takes the following form:

- (B.i) initial Price-calculation;
- (B.ii) Price-calculation derived;
- (B.iii) unrelated Value-calculation.

It is worth noticing that this old contrivance, already fulfilled by von Bortkiewicz himself, has recently been relabelled as the "inverse transformation problem," which is, as we have just shown, what von Bortkiewicz is actually proposing and manoeuvring around.<sup>20/</sup>

18 In the present chapter, we have been overlooking that von Bortkiewicz's schemes are devoid of denomination (and hence of annumeration), so as to follow his argument, leaving aside further hindrances his doctrine conveys, to which we have paid attention earlier on.

19 Von Bortkiewicz, 1952, p. 8.

20 For a thorough confusion of what von Bortkiewicz did and the derivations therefrom, see Morishima & Seton (1961):

"The initial problem to be faced [by the Soviet and Eastern European economists (who) have recently been troubled by a number of questions which might be brought under a common heading as the 'inverse transformation problem'] has therefore been the conversion of prices into 'values' (direct and indirect labour absorbed per unit of a commodity).

Thus, what is presented as the conversion of values into prices is not the transition of prices from values, or vice versa, but a manipulation of a system, already part and parcel of Price-calculation into a derived, handled (or overhandled even with several iterations <sup>21/</sup>) Price-calculation.<sup>22/</sup> This merely confirms our remarks in Chapter VII about the impossibility -not to say incoherency- of transiting from one principle (or system) of calculation into any other, as each is to constitute -due to their sophistic nature- a principle of its own.

It has thus been confirmed that in so far as each of von Bortkiewicz's principles of accounting are self-contained, it is impossible to recalculate each one of his systems even on its own, devoid as they are of ground <sup>23/</sup>.

Let us consider his initial Price-calculation, i.e.

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The classical problem of the opposite conversion (values into prices) has exercised many minds since the appearance of the third volume of Das Kapital...but the problem at issue here [ -the relationship between the price of commodities and their total labour content when the productive [?] contributions of all other factors [!] are imputed [!] to labour- ] has so far only received attention as a by-product of the analysis of Leontieff matrices." (p. 203)

Little as Morishima & Seton can penetrate on the subject they dissert, they do not realize that the vaunted "classical problem" which "exercised many minds" (commencing with Tugan-Baranowsky and von Bortkiewicz) set out to solve what they, forsooth, discovered half-a-century later, branded as the "inverse transformation problem". Hence, "the initial problem to be faced" is to achieve harmony, either presupposed or after a dexterous process of handling Price-calculation. We will only add that if these two great mandarins on the matter show anything, it is rather a classic ignorance at large which they offer to their cherished audience: the cultivated philistines.

21 For an example discussing the iterative approach, see Bródy (1970); for examples involved in an iterative approach, see Morishima & Catephores (1978) or Shaikh (1977).

22 Or from a presupposed Value-calculation into a manipulation of it, i.e. Value-calculation derived, while Price-calculation would have to be disregarded in order to "keep separate rigorously enough the two principles of value- and price-calculation". (von Bortkiewicz, 1952, p. 8)

23 It is ostensible that von Bortkiewicz is pretending to take demand for supply throughout, i.e. from (I), (2), and (3), so as to jettison any regulation of value. In (4), (5), and (6) he preserves the same vicious circle, though he attempts to identify the cost of his "goods" with what their supposed value is, moreover simultaneously. He does likewise in (II), (I2), and (I3), though there his ambiguity is redressed as Price-calculation.



(II)bis, (I2)bis, and (I3)bis, individually rewritten as

$$(II)bis' \quad Ic_1 + Iv_1 + qc_1 + qv_1 = c_1 + c_2 + c_3$$

$$(I2)bis' \quad Ic_2 + Iv_2 + qc_2 + qv_2 = v_1 + v_2 + v_3$$

$$(I3)bis' \quad Ic_3 + Iv_3 + qc_3 + qv_3 = s_1 + s_2 + s_3$$

We will observe that it is not until advancing Price-calculation that von Bortkiewicz remembered that it is the whole of  $c_i$  ( $i=1, 2, 3$ ) that is to reappear in the (price of the) annual product -as far as his formulae are concerned. However, if all the indexes, indexes which von Bortkiewicz takes to be value itself,<sup>24/</sup> i.e. if the entirety of indexes were to represent the value of constant capital, namely  $Ic_i$  ( $i=1, 2, 3$ ), then the rest of each individual expression would be equal to nought. That is to say,

$$qc_i = 0 \quad (i=1, 2, 3)$$

$$Iv_i = 0 \quad (i=1, 2, 3)$$

$$qv_i = 0 \quad (i=1, 2, 3)$$

Taken as a system, it could acquire the following form:

$$Ic_1 = Ic_1$$

$$Ic_2 = 0$$

$$Ic_3 = 0$$

But as von Bortkiewicz is ambiguous -by definition- he also ascribes the entirety of indexes to variable capital, i.e.  $Iv_i$  ( $i=1, 2, 3$ ). In such case, the rest of the components in each expression would be equal not nothing. That is to say,

$$Ic_i = 0 \quad (i=1, 2, 3)$$

$$qc_i = 0 \quad (i=1, 2, 3)$$

$$qv_i = 0 \quad (i=1, 2, 3)$$

Needless to further remind ourselves that  $q$  is meaningless, as in von Bortkiewicz's expressions it can but depict exclusively  
<sup>24</sup> "value is merely the index of an exchange relationship" (1952,p.5)

shares or percentages of a whole devoid of, avoiding denomination. In its entirety, such a whole cannot bear any addition; far less any multiplication. Were the expressions of von Bortkiewicz to be taken as a system, they would yield, according to the latest alternative, the following:

$$Iv_1 = 0$$

$$Iv_2 = Iv_2$$

$$Iv_3 = 0$$

Thus, it has been of no use for von Bortkiewicz to pretend to depict the whole outlay in the form of wages, or to explain surplus value in the form of an increase in the price over wages -moreover in natura.

Let us see how von Bortkiewicz proceeds, begging the reader, albeit again, of forgetting the results at which his systems lead.

We left him pondering how to cope with more "unknowns" than "equations". Let us see how he continues after having accounted the annual product twice as barter, as he might try, belatedly, to hide his charming primitivism.

Next, he concludes that

"In order to supply the missing fourth equation, we must determine the relation between the price unit and the value unit.

If we were to choose the price unit in such a way that total price and total value are equal, we would have to set

$$(I4) \quad Cx + Vy + Sz = C + V + S$$

where

$$(I5) \quad C = c_1 + c_2 + c_3$$

$$(I6) \quad V = v_1 + v_2 + v_3$$

$$(I7) \quad S = s_1 + s_2 + s_3$$

If, on the other hand, the price unit and the value unit are to be regarded as identical, then we have to consider in which of the three departments the good which serves as the value and price unit is produced. If gold is the good in question, then Department III is involved and in place of (I4) we get

$$(I8) \quad z = I$$

Let us follow this last procedure. In this fashion the number of unknowns is reduced to three (x, y, and z)." (von Bortkiewicz, 1949, p. 202)

Before we consider the fashion that von Bortkiewicz has chosen to sport, let us sum up. He has already placed himself under his own restrictions <sup>25/</sup> by which he is to abide.

He has decided that total price equals total value in spite of not knowing the capital of the persons concerned or the magnitude of value of the commodity product that he attempts to depict.

In spite of these limiting assumptions, von Bortkiewicz claims that it is not possible to equate total profit with total surplus value -always maintaining a double standard.

Furthermore, he realizes that "we have considered in which of the three departments the good which serves as the value and price unit is produced".

In other words, von Bortkiewicz is searching for value as a measure of value, and price as a "measure of price." Visibly exhausted after what he has had to consider -all on his own, he supposes that such "good" is gold in which "production", that is to say, consumption, Department III "is involved" <sup>26/</sup>.

Quite apart from his circumlocutions further identified, he does not realize the delight of having turned "capitalists' consumption goods" into gold itself. <sup>27/</sup>

Whether von Bortkiewicz would have chosen any other Department or "good" which serves "as a measure of value and of price", <sup>28/</sup> would not have changed the fact that for him, value and its price form are replaced by indexes, signs. Meanwhile, he presupposes that they are self-same, only to put each one of them later on, each in a distinct principle, i.e. Value-calculation; Price-calculation. He confirms himself as he has chosen a sole "good" as "measure of value and of price."

Nevertheless, Marx points out the quid pro quo fulfilled.

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25 "It would thus not be permissible to equate total price with total value whilst simultaneously equating total profit with total surplus value." (von Bortkiewicz, 1952, p. 12; emphasis added)

26 Expression (I8), i.e.  $z = I$  "involved" and depicted in its entirety, would expose, again, that he is referring to one single "good" which makes  $c_i, v_i, s_i$  ( $i = 1, 2, 3$ ) redundant.

27 It should be understood that due to his assumptions he faces "joint production." Meanwhile, he has endowed such capitalists' consumption fund with the same obstruction that Midas long ago encountered. But we already know that as an economist, our rigorous logician turns out to be a most ordinary story teller.

28 Von Bortkiewicz, 1952, p. 10.

"The operations of exchange do not give to the commodity which they transform into money its value, but its specific form of value. Confounding two things which are essentially distinct, it has become the custom to regard silver and gold as purely imaginary values(g).

g 'Gold and silver have their value as metals before they become money' (Galiani). Locke says: -'Silver has, by the universal consent of men, received an imaginary value because of those properties which fit it to fill the rôle of money.' Law, on the contrary, says: -'How could various nations give an imaginary value to an object whatever, and how could that imaginary value be maintained?' But he knew nothing about the matter, for elsewhere he says: -'Silver is exchanged according to the Use-value it possesses, i.e. according to its real value; by its adoption as money it acquires an additional value' (J.Law: 'Considérations sur le numéraire et le commerce,' p. 470)." (Marx, 1908, pp. 54, 55)

We leave the reader to judge how much von Bortkiewicz knows about the subject-matter when he discovers that gold has, moreover, like every other "good" -"the so-called 'absolute value'", or "real value",<sup>29</sup> and additional to it, value as if it "merely" were an index. This redundant meaningfulness is confirmed as it is exposed by "the missing fourth equation", i.e. (I8) -a bare tautology.

This corroborates the artless wish that it is the process of exchange -or von Bortkiewicz pretending to depict it out of his person-society- that endows or provides the commodities with value, moreover imaginary. And further to this, that they have another value beforehand. As we know, it is the duality of value with which we are already familiar. Von Bortkiewicz himself extends it to all the commodities or "goods", as he alternatively calls them. In this respect, Marx adds:

"The fact that money in certain of its functions may be replaced by simple symbols of itself, has given rise to the other error, that it is nothing but a symbol."

On the other hand, that error enables us to foresee that money, under the appearance of a visible object, conceals in reality a social relation. In that sense every commodity would be a symbol, because it is of value only so far as it is the material

29 Von Bortkiewicz explicitly recognizes that "absolute value" is "real value" when he acknowledges that

"The concept of 'real value' to express the quantity of labour required to produce a commodity was better developed in McCulloch, Principles of Political Economy, London, 1870 (reprint of the first edition of 1825), pp. 116-118 / than in Ricardo /." (1952, p. 5; emphasis added)



embodiment of the human labour expended in its production(h).

But when we see nothing but simple symbols in the social characters with which things are invested, or in the material characters which clothe the social conditions of labour on the basis of a given mode of production, we lend to them conventional fictions sanctioned by the so-called 'universal consent of men.' This was the method of explanation which prevailed in the 18th century; not being able to unravel either the origin or the development of the enigmatic forms of social relations, they encumbered them by declaring them to be something foreign and strange.

h 'Money is the symbol (of commodities)' (V. De Forbonnais. 'Eléments du commerce,' Leyden, 1766, t. II., p. 143). 'As a symbol it is attracted by commodities' (ibid). 'Money is a symbol of a thing, and represents it' (Montesquieu, 'Esprit des Lois'). 'Money is not merely a symbol, for it is itself riches; it does not represent values, it is equivalent to them' (Le Trosne, p. 910). Long before the economists, the jurists had brought into vogue the idea that money is only a symbol, and that the precious metals have only an imaginary value. Valets and sycophants of the royal power, they supported in the middle ages the right of kings and the falsification of money upon the traditions of the Roman empire, and according to the conception of the role of money which is found in the Pandects." (Marx, 1908, pp. 55, 56)

Von Bortkiewicz's notions of money are altogether curious. We have seen how he brings 18th century beliefs "up to date" in order to raise allegations against Marx. In his scholastic fashion, he chooses one commodity at random, to which he assigns as imaginary value. Value is purported as a reflection of such a commodity in its isolation, as if it were a natural property <sup>30/</sup> of its own and not as expressing a social relation through the commodities themselves.

With his system of four unknowns and three "equations," von Bortkiewicz is merely confirming his by now familiar tenets to us.

Value is displayed as a measure of value in Value-calculation. Meanwhile, the "price of money" is the "measure of price"

30 "We have already seen that in the simplest expression of value: x commodity A = y commodity B, the object by which the extent of value of another object is represented appears to possess its equivalent-form apart from the relation which, as a social property, it derives from nature. We have followed this deceptive apparition as far as its consolidation. That consolidation is achieved as soon as the general equivalent-form becomes exclusively attached to one particular commodity in which it is crystallised under the money-form."

(Marx, 1908, p. 57)

in Price-calculation. After these profoundly circular ponderings, he discovers that he can further self-identify them, while having unravelled "the measure of value and the measure of price", in a further tautology. Hence (I8).

In order to present money as the commodity due to which the rest of the commodities express their value, he has to engage in a dull Diophantine tirade. Within his restrictions and declared limitations, etc., he never understood that it is in fact that the rest of commodities express their value in money, that makes it acquire such form of general equivalent: the money form,<sup>31/</sup> vulgo price.

As we have seen, von Bortkiewicz has numerous fashions -to use his parlance- to be sported.<sup>32/</sup> The purpose of having chosen gold as "the good serving as a measure of value and price" has further implications.

First, he can present himself as a free trader vulgaris, discovering that he has got rid of all the "goods". Besides, he gets rid of them twice, as he has a most peculiar stratagem of double accounting.

Second, he has turned not only the capitalists' consumption "goods" into gold, but the "goods" in their entirety. As we know, he has assumed proportionality and contrived, both value and price to mere symbols -or indexes. This is, one might say, a mermaid chant directed to the superstitious monetarists.<sup>33/</sup>

Von Bortkiewicz has presented us with a commodity product which happens to be thrown into a singular process of exchange without price. It is not until "equation" (II) that he advances a numéraire, as a gadget pretending to depict price under what he calls the principle of Price-calculation. Moreover, for him money is presented devoid of value; devoid of its own function as a general measure of value.

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31 "A commodity does not seem to become money, because other commodities reciprocally express their values by its means; on the contrary, the latter seem to express their values by it because it is money."

(Marx, 1908, p. 57)

32 To pursue them, however, was the ad hoc role of his successors, once the master had provided the blinkers.

33 Whether the response has been enthusiastic enough, is an altogether different matter. The ability of the matchmaker does not necessarily guarantee, by itself, the success of the affair.

After he has the illusion of presenting money destitute of value -thanks to his generative powers-, he thinks that by considering money as a standard of price accounting -hence (18)-, a proportional part of gold will be exchanged by a proportional part of the commodities, as Marx exposes:

"The illusion that the commodity-prices are, on the contrary, determined by the sum total of the money in circulation, and that this sum total is in its turn determined by the quantity of the precious metals in the country (f), has its origin in the absurd hypothesis that commodities and money enter into circulation, the one without price and the other without value, and that an aliquot part of the whole mass of commodities is therefore exchangeable with an aliquot part of the heap of metal (g).

[In the corresponding footnote (f), Marx explains the first proponents of this magnificent discovery who are the source of their illustrious followers:]

f 'The prices of things will certainly rise in every nation, as the gold and silver increase among the people; and, consequently, where the gold and silver decrease in any nation, the prices of all things must fall proportionately to such decrease of money' (Jacob Vanderlint; 'Money answers all Things,' London, 1734, p.5). A close comparison of Vanderlint's work and Hume's Essay convince me, beyond all doubt, that Hume knew and made use of the earlier work. The idea that the quantity of money in circulation determines the price is found in Barbon, and many writers before him. 'No inconvenience,' says Vanderlint, 'can arise by an unrestrained trade, but very great advantage....since, if the cash of the nation decreased by it, which prohibitions are designed to prevent, those nations that get the cash will certainly find everything advance in price, as the cash increases among them. And....our manufactures and everything else will soon become so moderate as to turn the balance of trade in our favour, and therefore fetch the money back again' (l.c., p. 44).

[In footnote (g), Marx disposes of its pretended justification:]

g It is self evident that every single kind of commodity constitutes, by its price, an element of the sum total of prices of all the commodities in circulation; but it is impossible to understand how a collection of Use-values incommensurable one with another can be exchanged with any quantity of gold or silver which may be found in a country at any given time. If we reduce the whole contents of the commodity-world to one unique universal commodity, of which each single commodity is only an aliquot part, we have the following absurd equation: -The universal commodity = x cwts. of gold: commodity A = equals an aliquot part of the universal commodity = the same aliquot part of x cwts. of gold. This is stated with charming naïveté by Montesquieu: -"If we compare the mass of gold and silver which is in the world with the mass of commodities also there, it is certain that each ware or commodity may be compared with a certain portion of the other (the money). Suppose there were but a single ware or commodity in the world,



or only one buyer, and that this ware was divided like money; one portion of that commodity would answer to one portion of the mass of money; half the total of one to half the total of the other, etc. ...the establishment of the price of the things depends always fundamentally upon the proportion of the whole of the things to the money' (Montesquieu, l.c., v. III., pp. 12, 13). For the development of this theory by Ricardo, and by his disciples —James Mill, Lord Overstone, and others, see my 'Zur Kritik,' &c., pp. 140-146, and pp. 150, et seq." (Marx, 1908, p. 87)

While von Bortkiewicz has presupposed proportionality, all that he needed was precisely to present value as an imagery attributing it to a standard of account, i.e. "one", and the quantity of gold in its role of medium of circulation, i.e. coin, would follow suit. Proportionality between the "goods" and gold would follow for no other reason than that he has assumed it.<sup>34/</sup>

Such a frail argumentation is disposed of by Marx when it comes from the hands of its purporters; in particular of Montesquieu, as quoted above.

As could be seen, it is difficult to understand how the goods can be allocated a lump of gold and moreover exude proportionality, as well as coming out shouting their prices after this egregious exercise. As use-values, the commodities are just special equivalents between each other in their motley heterogeneity.

From "equation (II)," von Bortkiewicz can present himself as having thrown a lump of gold into the market and expecting that the Price-calculation of the commodities would follow. This is, of course, after he has made money appear as a most stringent —and platitudinarian— standard, i.e. numéraire one. A most admirable and stringent monetarist.

Also from "equation (II)" von Bortkiewicz does present himself as willing to get rid of the commodities at any Price-calculation, abolishing money all on his own, or more precisely, reducing every commodity to a special equivalent of itself, i.e. "monetizing" every good which he had the opportunity to buy.<sup>35/</sup>

34 That is if he had not forgotten his self-advice of keeping his double principles of calculation "separate rigorously enough".

35 "'What an imbroglio political economy is!' cries M. Proudhon. 'Cursed gold!' cries a communist comically! (through the mouth of M. Proudhon). 'You might as well say: Cursed wheat, cursed vines, cursed sheep! —for just like gold and silver, every commercial value must attain its strict and exact determination.'



A most admirable free trader vulgaris.

And in this procedure he confirms himself showing that the platitude is his best and only means of expression. In other words, his optimum means of making himself significant. As can be seen, Henry Dunning MacLeod was not alone.

"The merchant lays the chief stress on the qualitative side of the expression of value, and therefore on the equivalent-form of the commodity, which finds its full development in the money-form; while on the other hand the modern advocate of free-trade(ii), who is bound to get rid of his wares at any price, puts the stress on the quantitative side of the relative Value-form. For him, therefore, the expression of value has neither value nor extent of value beyond the exchange relationship indicated on the sheet containing the daily price-list. The Scotchman MacLeod, in order to dress up the sorely-perplexed ideas of Lombard Street in the most skilful fashion, places the successful synthesis between the bigoted merchants and the enlightened advocates of free-trade.

ii 'Freihandelshausirer,' free-trade hawker or pedlar.-J.B." (Marx, 1908, p. 27)

The fetishism of the commodity, in which von Bortkiewicz has scurrilously engaged himself in order to attack Marx has just lead him to further display the fetishism of money,<sup>36/</sup> whose mysterious qualities are confirmed in "the good [gold] serving as a measure of value and of price",<sup>37/</sup> always keeping as a good thaumaturge, ambiguous principles.

The idea of making sheep and vines attain the status of money is not new. In France, it belongs to the age of Louis XIV. At that period, money having begun to establish its omnipotence, the depreciation of all other commodities was being complained of, and the time when 'every commercial value' might attain its strict and exact determination, the status of money, was being eagerly invoked. Even in the writings of Boisguillebert, one of the oldest of French economists, we find:

'Money then, by the arrival of innumerable competitors in the form of commodities themselves, re-established in their true values, will be thrust back again within its natural limits.' (Economistes financiers du dix-huitième siècle, Daire edition, p. 422.)

One sees that the first illusions of the bourgeoisie are also their last." (Marx, 1978, p. 82)

36 "Hence the riddle presented by money is but the riddle presented by commodities; only it now strikes us in its most glaring form." (Marx, 1918, pp. 105, 106)

To claim that the process of price being a transformation of value is trivial, or an exercise in, say, overkill, would merely confirm its purporters whether as enlightened hawkers or whether as obsolete mercantilists.

37 Von Bortkiewicz, 1952, p. 10; emphasis added.

As for the rest, von Bortkiewicz is careful never to question either the very existence of these double principles, or if they were to exist, their source. All he was looking for is a formulation that could establish proportionality, equilibrium and harmony within the contradiction of labour and capital <sup>38/</sup>.

### 3. Preposterous search for an ambiguous strut: a postil

It might be appreciated that endless reams of paper could be filled with the doctrinaire overworking of the objection -so far groundless- as to how prices (of production) are transformed values, after Marx.

Once the commodity is taken for a "good", capital, money, and value itself are taken for symbols. Moreover, surplus value is replaced by profit upon alienation. After this accomplishment, the set up for the palinode commences, with no shortage of prescriptions in order to restore proportionality.

Particularly, in respect to the last point referring to surplus left by labour, Marx warns us against this pitfalls at an early stage, as follows:

"Thus capital cannot arise from circulation, and just as little can it arise outside the sphere of circulation. It must, therefore, at the same time, arise from it and not arise from it.

We have thus arrived at a double result.

The transformation of money into capital can thus be explained on the ground of the immanent laws of commodity-circulation, in such a manner that the exchange of equivalents forms the point of departure<sup>(oo)</sup>. Our money-holder who is as yet only a capitalist in the chrysalis state, should first of all buy commodities of their exact value, then sell them for that value, and at the end of the process, receive back more money than he advanced. The metamorphosis of the man of money into the capitalist has to take place within the sphere of circulation, and, at the same time, not to take place there! Such are the conditions of the problem. Hic Rhodus, hic salta!

<sup>oo</sup> After the preceding explanation, the reader will understand that

#### 38 Marx characterised this procedure as follows:

"In an advanced society the petty bourgeois is compelled by his very position to become a socialist on the one hand and an economist on the other; that is to say, he is dazed by the magnificence of the upper middle class and has sympathy for the sufferings of the people. Deep down in his heart he flatters himself that he is impartial and has found the right equilibrium, which claims to be something different from the juste-milieu. Such a petty-bourgeois deifies contradiction because contradiction is the essence of his existence. He is himself simply social contradiction in action. He must justify in theory what he is in practice". (1977, p. 16)

what is meant is this: -The formation of capital should be possible at the same time as the prices of commodities are equal to their value. If these differ, it is necessary to adjust them -that is, to set aside that circumstance as though it were purely accidental, in order to be able to observe the phenomenon of the formation of capital in its integrity upon the basis of the exchange of commodities, without being troubled by those incidents which only help to complicate the problem. We know, moreover, that this reduction is not merely a scientific process. The continuous oscillations of prices on the market -their rising and falling- compensate and reciprocally annul each other, and maintain an average price as their internal law. This law forms the guiding star of the merchant or the workman in any undertaking which requires a length of time to carry out. They know that if they take a period long enough, goods will sell at their average price -neither above it nor below it. Thus if the workman had an interest in seeing clearly, he would put the problem thus: -'How can capital be produced if prices are regulated by their average price, that is to say, in the last instance, by the value of the commodity?' I say, 'in the last instance,' because the average price does not coincide directly with the value of commodities, as Adam Smith, Ricardo, and others believe." (Marx, 1908, p. 127)

From what has been exposed, the reader will realize that, for a start, von Bortkiewicz has attempted the process of expansion of value taking as a starting point a non-equivalence.

But before von Bortkiewicz reaches this stage, he has by then, already managed to find that value is "merely the index" of an exchange relationship, in addition to the so-called "absolute value" -which happens to be identical to itself. On the basis of the latter duality of value, he erects a double principled calculation. One distinct set of index numbers, i.e. Value-calculation, another distinct set of index numbers, i.e. Price-calculation. After this double set of pure numéraires has been depicted, von Bortkiewicz finds all on his own, that the value and price of a commodity cannot even be coincident, far less can be transformed one into the other. Therefore, he cannot reduce price to value, as the latter does not determine price, but is totally unrelated, after the chain of dualities has been fulfilled. This does not stop their interested followers in overworking with such indexes, in spite of ignoring the actual magnitude (or extent) of value the commodities they claim to be handling. Their argument is devoid of substance.

It is not enough for von Bortkiewicz and his followers to forget that indexes -purported as commodity values- are devoid of homogeneity or additivity. They seem to indulge themselves in further algebraic manipulations, after they have assumed what they pretended



to prove: the divergence between a set of symbols and a distinct set of symbols. And they confirm themselves as they find that they do not coincide.

Far from undertaking the analysis in its purity, not satisfied with contaminating it, they replace it at every stage. That is why we have tried to follow von Bortkiewicz from the outset, while showing both how he thoroughly supplanted Marx and how Marx disposed of the very argument that von Bortkiewicz put forward in the guise of interpreting him.

As for the average price, it is alien, unnecessary and impossible category for von Bortkiewicz. Aside from his duality of value, for him two commodities cannot be compared as magnitudes of value that they are.<sup>39/</sup>

Moreover, von Bortkiewicz and his followers are at pains to solve a reflexive problem devoid of content and which disposes even of the market. In spite of it and despite it, they try to convince us that manipulating percentages is the road to confirm their assumptions. They do not realize that at the same time, they are claiming that the market, as an impersonal force by means of the atomistic intercourse of its participants, is to be endowed with their admirable algebraic knowledge. In the same guise, it could be said that the commodities could not be exchanged, unless the last agent in the market is an enlightened consumer in the same manner as them, who seek to strengthen a pre-established economic harmony, or alternatively, the means to attain it.

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39 That is why he replaces individual capitals by unique Spheres of Production, while at the same time he has omitted the fact that capitals of the same extent of value have very different proportions of constant capital and variable capital, yielding very different magnitudes of value. But it did not occur to him to reckon this actual fact. He rendered redundant any explanation of such an obvious occurrence for the mighty thinker that he was.



E P I L O G U E

Marx to Engels <sup>1/</sup>

June 27, 1867.

"[...]" In regard to what you say about the inevitable doubts of the philistine and vulgar economist <sup>2/</sup> (who naturally forget that if they figure paid labour as wages they figure unpaid labour as profit, etc.), the whole thing boils down, scientifically expressed to the following question:

How is the value of a commodity transformed into its price of production, in which

- 1) the whole labour seems to be paid in the form of wages;
- 2) the surplus labour, or surplus value, however, assumes the form of an increase in price named interest, profit, etc., over and above the cost price (= price of the constant capital + wages).

Answering this question presupposes:

I. That the transformation of, for example, the value of a day's labour power into wages, or the price of a day's labour has been demonstrated. This is done in Chapter V of this volume.

II. That the transformation of surplus value into profit, of profit

1 (1956, pp. 229 - 231).

2 Marx replies here to the following passage in Engels' letter of June 26, 1867:

'On the genesis of surplus value let me add the following: The manufacturer and together with him the vulgar economist will at once raise this objection against you: If the capitalist pays the worker only the price of 6 hours for his 12 hours' working time, no surplus value can arise from this, for then each hour's labour of the factory worker counts only as 1/2 hour's labour -as equal to whatever is paid for it- and enters into the value of the product of labour only to the extent of that value. Then follows, as an example, the ordinary calculation formula: so much for the raw materials, so much for depreciation, so much for wages (really expended, per real hour's product), etc. No matter how frightfully shallow this argument is and how identifies exchange value with price and value of labour with wages, no matter how absurd its premise that one working hour enters into value is worth only half an hour, I am nevertheless surprised that you have not yet paid attention to this, for it is quite certain that objections will immediately be raised against you on this account and it is better to settle the point in advance.' -Ed.

into average profit, etc. has been demonstrated. This takes for granted a priori demonstration of the circulation process of capital, since the turnover of capital, etc., plays a role here. This matter therefore cannot be presented before the third book (Volume II contains books two and three). There it will be seen what the philistine's and vulgar economist's way at looking at things stems from, namely, from the fact that it is only the direct form of manifestation of relations that is reflected in their brains and not their inner connection. Incidentally, if the latter were the case what need would there be of science?

If I were to cut short all doubts in advance I would spoil the whole method of dialectical exposition. On the contrary. This method has the advantage of constantly setting traps for those fellows which provoke them to an untimely manifestation of their asininity.

Moreover, immediately after § 3: 'The Rate of Surplus Value,' the last you had in hand, follows 'The Working Day' (struggle over the length of the working time), the treatment of which plainly shows how very well Mister Bourgeois is enlightened practically on the source and essence of his profit. This is also apparent in the Senior case, in which the bourgeois asserts that all his profit and interest are derived from the last unpaid working hour.

Best regards to Mrs. Lizzy.

Yours,

K. M."

## A P P E N D I X

### THE THREE EQUATIONS OF AN ABSOLUTE REALM

#### I. A restored estate of Comte Destutt de Tracy

As a supplement let us elucidate how Marx himself disposed of the system of platitudes which von Bortkiewicz has advanced in the form of three "equations" -nominally (1), (2), and (3).

For a start, let us take the second "equation".

$$(2) \qquad c_2 + v_2 + s_2 = v_1 + v_2 + v_3$$

Here, we are told that "the production of subsistence goods for the workers...amounts to exactly as much as the wages received by the workers" <sup>1/</sup>. But still, we do not understand how the capitalists enrich themselves,

"For instance, if the capitalists have paid  $\lceil v_1 + v_2 + v_3 \rceil$  pounds sterling to their laborers as wages, and if these same laborers buy from the same capitalists commodities of this same value of  $\lceil c_2 + v_2 + s_2 \rceil$  pounds sterling, so that what the capitalists have advanced to the laborers as wages returns to the capitalists when the laborers spend it for commodities, then the capitalists get richer. A common mortal would think that the capitalists recover only their  $\lceil v_1 + v_2 + v_3 \rceil$  pounds sterling, which they possessed before this transaction. At the beginning of the transaction they have  $\lceil v_1 + v_2 + v_3 \rceil$  pounds sterling. They buy labor-power valued at  $\lceil v_1 + v_2 + v_3 \rceil$  pounds sterling. This labor-power, so bought, produces commodities of a certain value, which, so far as we know, amounts to  $\lceil c_2 + v_2 + s_2 \rceil$  pounds sterling. By selling these commodities for  $\lceil c_2 + v_2 + s_2 \rceil$  pounds sterling to their laborers, the capitalists recover  $\lceil v_1 + v_2 + v_3 \rceil$  pounds sterling in money. The capitalists then have once more  $\lceil v_1 + v_2 + v_3 \rceil$  pounds sterling, the same as before, and the laborers have  $\lceil c_2 + v_2 + s_2 \rceil$  pounds sterling's

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<sup>1</sup> Von Bortkiewicz, 1952, p. 9.

worth of commodities which they have themselves produced. It is hard to understand how that can make the capitalists any richer. If they did not recover the  $\lfloor v_1 + v_2 + v_3 \rfloor$  pounds sterling, then they would have to pay first  $\lfloor v_1 + v_2 + v_3 \rfloor$  pounds sterling to the laborers in wages and then to give them their product for nothing, although it is also worth  $\lfloor c_2 + v_2 + s_2 \rfloor$  pounds sterling. The reflux of this money might therefore at best explain, why the capitalists do not get any poorer by this transaction, but not, why they get richer by it.

It is another question how the capitalists got possession of the  $\lfloor v_1 + v_2 + v_3 \rfloor$  pounds sterling, and why the laborers, instead of working for their own account, are compelled to exchange their labor-power for this money. But this is a fact which is self-explanatory for a thinker of Destutt's  $\lfloor$ and of von Bortkiewicz's $\rfloor$  caliber.

However, Destutt himself is not quite satisfied with his solution. He  $\lfloor$ alongside von Bortkiewicz et al. $\rfloor$  did not simply tell us that the capitalist get richer by spending a sum of  $\lfloor v_1 + v_2 + v_3 \rfloor$  pounds sterling in money and then recovering the same amount. He had not plainly spoken of a reflux of  $\lfloor v_1 + v_2 + v_3 \rfloor$  pounds sterling which merely explains why this money is not lost. He had told us that the capitalists get richer 'by selling everything which they produce for more than it has cost to produce.'

Consequently the capitalists must also get richer by their transaction with the laborers by selling too dearly to them. Very well! 'They pay wages \* \* \* \* and all this flows back to them by the expenditures of all these people who pay them more' (for the products) 'than they cost the capitalists in wages.' (Page 240.) In other words, the capitalists pay  $\lfloor v_1 + v_2 + v_3 \rfloor$  pounds sterling in wages to the laborers, and then they sell to these laborers their own product at  $\lfloor c_2 + v_2 + 2s_2 \rfloor$  pounds sterling, so that they not only recover their  $\lfloor c_2 + v_2 + s_2 \rfloor$  pounds sterling, but also gain  $\lfloor s_2 \rfloor$  pounds sterling. That is impossible. The laborers can pay for the commodities only with the money which they receive in the form of wages. If they get only  $\lfloor v_1 + v_2 + v_3 \rfloor$  pounds sterling in wages, they can buy only  $\lfloor c_2 + v_2 + s_2 \rfloor$  pounds sterling's worth, not  $\lfloor c_2 + v_2 + 2s_2 \rfloor$  pounds sterling's



worth. This is therefore impracticable. But there is still another way. The laborers buy from the capitalists commodities for  $\lfloor c_2 + v_2 + s_2 \rfloor$  pounds sterling, but receive only  $\lfloor c_2 + v_2 \rfloor$  pounds sterling's worth. They are cheated out of  $\lfloor s_2 \rfloor$  pounds sterling. Then the capitalists have certainly gained  $\lfloor s_2 \rfloor$  pounds sterling, because he practically pays  $\lfloor s_2 / (v_1 + v_2 + v_3) \rfloor$  per cent less than the actual value for labor-power. This is equivalent to cutting wages  $\lfloor s_2 / (c_2 + v_2 + s_2) \rfloor$  per cent by a circuitous route.

The capitalists would accomplish the same end if they paid the laborers in the first place only  $\lfloor v_1 + v_2 + v_3 - s_2 \rfloor$  pounds sterling in wages and gave them only  $\lfloor c_2 + v_2 \rfloor$  pounds sterling's worth of commodities in exchange. This seems to be the normal way for the class of capitalists as a whole, for according to Destutt the laboring class must 'receive sufficient wages' (page 219), since their wages must be at least sufficient to maintain them alive and working, 'to gain the barest subsistence' (page 180). If the laborers do not receive such sufficient wages, then that means according to Destutt 'the death of industry' (page 208), which does not seem to be a way by which the capitalists can get richer. But whatever may be the scale of wages, paid by the capitalists to the laborers, they have a certain value, for instance,  $\lfloor v_1 + v_2 + v_3 - s_2 \rfloor$  sterling pounds. If the capitalist class pays the laborers  $\lfloor v_1 + v_2 + v_3 - s_2 \rfloor$  pounds sterling, then it has to supply them with commodities worth  $\lfloor c_2 + v_2 \rfloor$  pounds sterling in exchange for these wages, and the reflux of this sum does not make the capitalists any richer. If the capitalists pay the laborers  $\lfloor v_1 + v_2 + v_3 \rfloor$  pounds sterling in wages, and supply them in exchange for  $\lfloor v_1 + v_2 + v_3 \rfloor$  pounds sterling only with  $\lfloor c_2 + v_2 \rfloor$  pounds sterling's worth of commodities, then they pay  $\lfloor s_2 / (v_1 + v_2 + v_3 - s_2) \rfloor$  per cent above their normal scale in wages and supply on the other hand  $\lfloor s_2 / (c_2 + v_2) \rfloor$  per cent less in commodities.

In other words, the fund from which the capitalist class would derive its profits, would be made up of deductions from the normal scale of wages of the laborers, by paying less than its value for labor-power, in other words, less than the value of the necessities of life required for the normal reproduction of the laborer. If the

normal scale of wages were paid, which is supposed to be the case according to Destutt [alongside von Bortkiewicz], there can be no fund for profits, neither for the industrial nor for the idle capitalists.

Hence Destutt [and von Bortkiewicz] should have reduced the entire secret of how the capitalists class get richer, to these words: A deduction from the wages of the laborers. In that case the other sources of surplus-value, which he mentions under (1) and (3), would not exist.

Under these conditions all the countries, in which the money paid to the laborers in wages is reduced to the value of the articles of consumption required for the subsistence of the working class, would not have any fund for the consumption of capitalists, nor any fund for the accumulation of capital. In other words, there would be no fund permitting a capitalist class to live, and therefore no capitalist class. And according to Destutt this would be the case in all wealthy and developed countries with an old civilization, for in them, 'in our deeprooted old societies, the fund from which wages are paid \* \* \* \* is an almost constant magnitude' (page 202).

Even with a deduction from the wages, the capitalist does not enrich himself by first paying the laborer  $[v_1 + v_2 + v_3]$  pounds sterling in wages and then supplying him with  $[c_2 + v_2]$  pounds sterling's worth of commodities for  $[v_1 + v_2 + v_3]$  pounds sterling of wages, in other words, by circulating  $[c_2 + s_2]$  pounds sterling's worth of commodities by means of  $[v_1 + v_2 + v_3]$  pounds sterling, an excess of  $[s_2 / (c_2 + v_2)]$  per cent. The capitalist gets richer by appropriating, aside from the surplus-value -that portion of the product in which surplus-value is incorporated-  $[s_2 / (c_2 + v_2)]$  per cent of that portion of the product which the labourer should receive in exchange for his wages: The capitalist class would not gain anything by the silly method which Destutt assumes [duly reflected in von Bortkiewicz]. They pay  $[v_1 + v_2 + v_3]$  pounds sterling for wages and give to the laborer for these  $[v_1 + v_2 + v_3]$  pounds sterling a part of his own product valued at  $[c_2 + v_2]$  pounds sterling. But in the next transaction they must again advance  $[v_1 + v_2 + v_3]$  pounds sterling for the same purpose. They would thus indulge in the useless sport of

advancing  $\lfloor v_1 + v_2 + v_3 \rfloor$  pounds sterling in money and giving in exchange therefore  $\lfloor c_2 + v_2 \rfloor$  pounds sterling in commodities, instead of paying  $\lfloor v_1 + v_2 \rfloor$  pounds sterling, and exchanging it for  $\lfloor c_2 + v_2 \rfloor$  pounds sterling in commodities. That is to say, they would be continually advancing a money-capital which is  $\lfloor v_3 / (v_1 + v_2) \rfloor$  per cent in excess of the normal required for the circulation of their variable capital. That is a very peculiar method to get rich."

(Marx, 1915, pp. 562 - 565; in this quotation and in quotations below, rectangular parentheses substitute the notation used by von Bortkiewicz for Marx's figures)

Let us consider the third "equation" of the system presented by von Bortkiewicz.

$$(3) \quad c_3 + v_3 + s_3 = s_1 + s_2 + s_3$$

Here we are told that the capitalist class sells to itself "capitalists' consumption goods" which is equal to the total surplus-value. The value of the commodities consumed by the capitalist class is to amount  $\lfloor c_3 + v_3 + s_3 \rfloor$  sterling pounds, which are payable in entirety with the surplus value of that class, which consists of a sum of money,  $\lfloor s_1 + s_2 + s_3 \rfloor$  sterling pounds. But even if this was the case, we have already examined how following von Bortkiewicz and Destutt, such a consumption fund for capitalists cannot exist.

Therefore, the industrial capitalists of (3), producing capitalists' consumption "goods", could not sell their commodities at the value of  $\lfloor c_3 + v_3 + s_3 \rfloor$  sterling pounds among themselves. Moreover, according to von Bortkiewicz these commodities have already been produced. However, they could just give them away for nothing. But it is somewhat difficult to explain how this can happen year after year, ad infinitum. But for an economist of the stature of von Bortkiewicz, this seems to have been so self-evident that he abstained from providing any explanation to us. He has not told us that from the beginning his system implied the immolation of the "capitalists' consumption goods", and hence of the capitalist class in their role of individual consumers of commodities. Far from enriching themselves, such industrial capitalists would not only never earn a farthing: while they follow our logician's advice, they would even lose the whole value of  $\lfloor c_3 + v_3 + s_3 \rfloor$  sterling pounds embodied in



commodities that he claims have been produced -or are being produced- in Department III. It is difficult to decide what to admire more; either the diligence of such industrious capitalists in surrendering their commodity product of a value of  $\angle c_3 + v_3 + s_3 \angle$  sterling pounds for nothing, or the torpid explanations of von Bortkiewicz, albeit in his own brand of algebra. But to avoid anticipating, let us content ourselves with the analysis of (3) and draw out its meaning.

If the capitalist class is allocated, for instance,  $\angle s_1 + s_2 + s_3 \angle$  sterling pounds by way of revenue, and then this capitalist class in their role of individual consumers buy from the same capitalists of Department III commodities for the value of  $\angle c_3 + v_3 + s_3 \angle$  sterling pounds, so that the sum of  $\angle s_1 + s_2 + s_3 \angle$  sterling pounds that the capitalists as individual consumers have advanced return to the capitalists of Department III when they sell to their fellow associates commodities for the value of  $\angle c_3 + v_3 + s_3 \angle$  sterling pounds, this is -according to von Bortkiewicz- to be good for the enrichment of capitalists. When this question is considered in terms of plain common sense, at least, it seems that at the end of this wanton revolving mechanism the capitalists of Department III could do nothing else but recover the  $\angle c_3 + v_3 + s_3 \angle$  sterling pounds exchanged for  $\angle s_1 + s_2 + s_3 \angle$  sterling pounds. At the beginning of the mechanism, the capitalists are in possession of  $\angle s_1 + s_2 + s_3 \angle$  sterling pounds in commodities.

At the end of the mechanism, they are in the same position that they were at the beginning. It is not seen how the capitalist can enrich himself through this device. If the  $\angle s_1 + s_2 + s_3 \angle$  sterling pounds were not to return to their hands, it would happen that apart from having already commodities for a value which, as far as we know amounts to  $\angle c_3 + v_3 + s_3 \angle$  sterling pounds, the industrious capitalists of Department III would not only forego the possibility of realizing a profit, but would have to hand over gratis their product, i.e. the  $\angle c_3 + v_3 + s_3 \angle$  sterling pounds in capitalists' consumption "goods". And this is precisely the case we have observed before. Therefore, the reflux of  $\angle s_1 + s_2 + s_3 \angle$  sterling pounds with which the capitalists buy their commodities from the consumption fund, does explain, at best, why the capitalists could exist exclusively as a class of consumers, or even as individual consumers -following our subtle logician- but never how they can derive this



fund, or how can they actually enrich themselves from such proceedings.

However, if "equation" (3) as such is unyielding, let us consider von Bortkiewicz's double principles, whereby the capitalists get richer by adding a markup to their commodity product. By means of supposition, let us start with the eventuality that the industrial capitalists of Department III sell their commodities of a value of  $\angle c_3 + v_3 + s_3 \angle$  sterling pounds, for a value over and above that value by  $\angle s_3 \angle$  sterling pounds.

"In other words, the capitalists enrich themselves by mutually getting the best of one another in the exchange of that portion of their surplus-value which they reserve for their individual consumption, or consume as revenue. For instance, if this portion of their surplus-value, or of their profits, is  $\angle c_3 + v_3 + s_3 \angle$  pounds sterling, this sum is supposed to be increased to, say,  $\angle c_3 + v_3 + 2s_3 \angle$  pounds sterling by mutually selling their respective shares at an excess of  $\angle s_3 / (c_3 + v_3 + s_3) \angle$  per cent over the normal. But if all do the same, the result will be just what it would have been if they had mutually sold their shares at their normal values. They merely need in that case  $\angle s_1 + s_2 + 2s_3 \angle$  pounds sterling in money for the circulation of commodities valued at  $\angle c_3 + v_3 + s_3 \angle$  pounds sterling, and this would seem to be rather a method of impoverishing than of enriching themselves, since it means that they are compelled to reserve a large portion of their total wealth unproductively in the state of a medium of circulation. The outcome is simply that the capitalist class can divide only  $\angle c_3 + v_3 + s_3 \angle$  pounds sterling's worth of commodities among themselves for their individual consumption, after nominally raising prices all around, but that they do one another the favour of circulating  $\angle c_3 + v_3 + s_3 \angle$  pounds sterling's worth of commodities by means of a quantity of money which would just as well circulate  $\angle c_3 + v_3 + 2s_3 \angle$  pounds sterling's worth of commodities."

(Marx, 1915, p. 561)

It might well be that the value of the commodities produced by the industrial capitalists of Department III is not  $\angle c_3 + v_3 + s_3 \angle$  sterling pounds as in the previous case, but  $\angle c_3 + v_3 \angle$  sterling pounds, as the capitalists sell it to themselves with a markup of  $\angle s_3 \angle$  sterling pounds over and above its value:

"For instance, if this portion of their surplus-value, or of their profits, is  $\lfloor c_3 + v_3 \rfloor$  pounds sterling, this sum is supposed to be increased to, say,  $\lfloor c_3 + v_3 + s_3 \rfloor$  pounds sterling by mutually selling their respective shares at an excess of  $\lfloor s_3 / (c_3 + v_3) \rfloor$  per cent over the normal. But if all do the same, the result will be just what it would have been if they had mutually sold their shares at their normal values. They merely need in that case  $\lfloor c_3 + v_3 + s_3 \rfloor$  pounds sterling in money for the circulation of commodities valued at  $\lfloor c_3 + v_3 \rfloor$  pounds sterling, and this would seem to be rather a method of impoverishing than of enriching themselves, since it means that they are compelled to reserve a large portion of their total wealth unproductively in the state of a medium of circulation. The outcome is simply that the capitalist class can divide only  $\lfloor c_3 + v_3 \rfloor$  pounds sterling's worth of commodities among themselves for their individual consumption, after nominally raising prices all around, but that they do one another the favour of circulating  $\lfloor c_3 + v_3 \rfloor$  pounds sterling's worth of commodities by means of a quantity of money which would just as well circulate  $\lfloor c_3 + v_3 + s_3 \rfloor$  pounds sterling's worth of commodities."

(Marx, 1915, p. 561)

Let us consider the first identity.

$$(I) \quad c_1 + v_1 + s_1 = c_1 + c_2 + c_3$$

Here we are told that the capitalist class sells to itself means of production for a value of  $\lfloor c_1 + v_1 + s_1 \rfloor$  sterling pounds, which are fully paid and are to reflect the needs for constant capital of the capitalists.

At the same time, such identity asserts implicitly, that the needs for constant capital of the capitalists are equal to the production of means of production, as they are to coincide always. Instead of analysing under what conditions they can be equal, he merely presupposes their identity in a tautology.

According to (I), the industrial capitalists sell their commodities to themselves and to the rest of their fellow capitalists and in doing so they recover the value of such means of production.

It is difficult to understand how the reflux from the capitalists of a sum of money of  $\lfloor c_1 + c_2 + c_3 \rfloor$  sterling pounds

to the capitalists themselves in payment of means of production for the amount of  $\lfloor c_1 + c_2 + c_3 \rfloor$  sterling pounds constitute a source of enrichment of these capitalists engaged "where the means of production are produced".

Therefore, if the capitalist class as a whole pays to the capitalist class of (I), say  $\lfloor c_1 + c_2 + c_3 \rfloor$  sterling pounds by way of means of production and the capitalists of (I) have to surrender in exchange commodities to the value of  $\lfloor c_1 + v_1 + s_1 \rfloor$  sterling pounds, this would according to von Bortkiewicz's own brand of "Simple reproduction" serve for the enrichment of the capitalists of (I). With a basic supply of horse commonsense, it would appear that at the end of this circular excursion, the capitalists of (I) have but recovered a sum of money of  $\lfloor c_1 + c_2 + c_3 \rfloor$  sterling pounds equal to  $\lfloor c_1 + v_1 + s_1 \rfloor$  sterling pounds that they already owned -as far as we know- before this procedure.

However, it might be alleged that the sum of money advanced by the capitalists at the beginning of their procedure was not  $\lfloor c_1 + v_1 + s_1 \rfloor$  sterling pounds, but  $\lfloor c_1 + v_1 \rfloor$  sterling pounds, considering the notorious clarity of von Bortkiewicz informing us what actually constitutes the "entire advanced capital (including the constant capital)" <sup>2/</sup>.

"In other words, the capitalists enrich themselves by mutually getting the best of one another in the exchange of that portion of their surplus-value which they reserve for their individual consumption, or consume as revenue. For instance, if this portion of their surplus-value, or of their profits, is  $\lfloor c_1 + v_1 \rfloor$  pounds sterling, this sum is supposed to be increased to, say,  $\lfloor c_1 + v_1 + s_1 \rfloor$  pounds sterling by mutually selling their respective shares at an excess of  $\lfloor s_1 / (c_1 + v_1) \rfloor$  per cent over the normal. But if all do the same, the result will be just what it would have been if they had mutually sold their shares at their normal values. They merely need in that case  $\lfloor c_1 + v_1 + s_1 \rfloor$  pounds sterling in money for the circulation of commodities valued at  $\lfloor c_1 + v_1 \rfloor$  pounds sterling, and this would seem to be rather a method of impoverishing than of enriching themselves, since it means that they are compelled to reserve a large portion of their total wealth unproductively in the state of a medium of

circulation. The outcome is simply that the capitalist class can divide only  $\lfloor c_1 + v_1 \rfloor$  pounds sterling's worth of commodities among themselves for their individual consumption, after nominally raising prices all around, but that they do one another the favour of circulating  $\lfloor c_1 + v_1 \rfloor$  pounds sterling's worth of commodities by means of a quantity of money which would just as well circulate  $\lfloor c_1 + v_1 + s_1 \rfloor$  pounds sterling's worth of commodities." (Marx, 1915, p. 561)

It is of no avail to assume that the value of commodities to be sold as means of production is equal to  $\lfloor c_1 + v_1 + s_1 \rfloor$  sterling pounds. In this case the industrial capitalists belonging to Department I "where means of production are produced", would have to sell them over and above their value, say at  $\lfloor c_1 + v_1 + 2s_1 \rfloor$  sterling pounds, in order to enrich themselves while persisting in a mutual deception.

Naturally, it is a different problem to know how the capitalists as a whole possess  $\lfloor c_1 + c_2 + c_3 \rfloor$  sterling pounds in means of production, and in particular  $\lfloor c_1 \rfloor$  sterling pounds, all the more so when at the end of every single "prime" year an apocalypse of means of production is to take place. And why, moreover, are labourers compelled to sell their labour power to the capitalists? This is so obvious for an economist like von Bortkiewicz, that he omitted any explanation.

Taking the three "equations," as a whole, we have seen that von Bortkiewicz follows Destutt closely, and confirms the impossibility of the capitalists enriching themselves. This is whether they add markups that have been assumed beforehand, or whether they add them post festum; exposing aberrations long ago refuted by Marx.

Furthermore, in connection with "equations" (1), and (3), Marx adds:

"And this is saying nothing about the fact that the assumption deals here only with a 'portion of their profits,' or any supply of commodities representing profits. But Destutt undertook precisely to tell us where these profits come from. The quantity of money required to circulate it represents a very subordinate question. It seems that the quantity of commodities, in which the profit is incorporated, is produced by the circumstance that the capitalists



do not only sell these commodities to one another (an assumption which is quite fine and profound), but also mutually sell them too dearly. Thus we are acquainted with the secret of the wealth of the capitalists. It is on a par with the secret of Reuter's funny 'Inspector Braesig' who discovered that the great poverty is due to the great 'pauvreté.'"  
(Marx, 1915, pp. 561, 562) 2/

We have followed Marx in analysing the triad that von Bortkiewicz has presented as the forge over which he manipulated a correction on the conversion of values into prices, in view of Marx's "ignorance" in algebra, not to mention political economy, so consistently adumbrated by our rigorous logician.

However, "equations" (1), (2), and (3) represent, as far as we know, industrial capital as it resolves itself into three Departments of industrial (and industrious) consumption. But, for example, everybody knows that in capitalists societies, the property of money capital and the property of land do allow bank capital and capital invested in land to derive (and share) a portion of surplus value, vulgo interest and ground rent.

Von Bortkiewicz solves this question by effacing the landlords from his system, and by abstaining from saying a word about bank capital, while he seems to glorify the laboriousness of the industrial capitalist in his role of individual consumer.

2 Among the caring inspections vulgar economics has accomplished into the realm of poverty, stands out as a well trodden example the secret by which poor countries are impoverished, revealed as follows: "It the vicious circle of poverty implies a circular constellation of forces tending to act and react upon one another in such a way as to keep poor a country in a state of poverty. Particular instances of such circular constellations are not difficult to imagine. For example, a poor man may not have enough to eat; being under-fed, his health may be weak; being physically weak, his working capacity is low, which means that he is poor, which in turn means that he will not have enough to eat; and so on. A situation of this sort, relating to a country as a whole, can be summed up in the trite proposition: 'a country is poor because it is poor.'"

(Ragnar Nurkse, 1953, p. 4; emphasis added)

Further, Nurkse can conclude:

"We should perhaps hesitate to call the circle vicious; it can become beneficent." (1953, p. 11)

That is to say, the beneficent circle of poverty. Curiously enough, Gunnar Myrdal takes Nurkse seriously, while seeking -"to formulate in simple terms the logic of underdevelopment, development and planning for the development." (Myrdal, 1968, p. 1843), discovering that "the basic notion of circular causation," (p. 1844) is capable

It might well be that ignorance -either candid or pretended- provides for the happiest life, but it is of no help in explaining how the first two (bank capital and land capital) do actually participate in the appropriation of surplus value.

To say that ground rent and interest constitute a deduction from the price obtained by the industrial capitalists (rather than a deduction from the surplus value in which land rent and bank capital are represented), would just entangle its proponents into further aberrations, as noted by Marx.

"Of course, the land and capital borrowed by the industrial capitalists from the idle capitalists and paid for by a portion of their surplus-value in the form of ground rent and interest, etc., are profitable for them, for they constitute one of the conditions for the production of any commodity, and more especially of that portion of the product, which creates surplus-value, or in which surplus-value is incorporated. This profit flows from the use of the borrowed land and capital, not out of the price paid for them. This price rather constitutes a deduction from the profit. Or one would have to contend, that the industrial capitalists do not get richer, but poorer, if they are enabled to keep the other half of their surplus-value, instead of being compelled to give it up. This is the confusion which results from the indiscriminate mixing up of such phenomena of circulation as a reflux of money with the distribution of the product, which is merely promoted by this circulation."  
(Marx, 1915, p. 567)

While von Bortkiewicz excludes landlords explicitly and bank capital implicitly, it would appear that the industrial capitalists would impoverish themselves if they were to pay interest and ground rent to the former two. It would be -according to von Bortkiewicz- a deduction from the benefit obtained that would impoverish them, instead of enhancing their enrichment.

We shall now refer to von Bortkiewicz's system as a whole, as we follow Marx's dictum on Destutt, also an enlightened logician:

of yielding either "a cumulative downward movement" (p. 1845), or "a cumulative upward movement" (p. 1846).  
Ingenuous ingenueness knows no limits.

"As an illustration of the confused and at the same time boastful thoughtlessness of political economists analyzing social reproduction, the great logician Destutt de Tracy may serve (compare volume I, page 181, footnote 1), whom even Ricardo took seriously, calling him a very distinguished writer.

This distinguished writer makes the following revelations concerning the entire process of social reproduction and circulation;

'One may ask me how these industrial capitalists can make such large profits and out of whom they can draw them, I reply that they do so by selling everything which they produce for more than it has cost to produce; and that they sell

(1) to one another to the extent of the entire share of their consumption, intended for the satisfaction of their needs [as 'where means of production are produced'], which they pay with a portion of their profits [i.e., (1)  $c_1 + v_1 + s_1 = c_1 + c_2 + c_3$ ];

(2) to the wage workers, both those whom they [capitalists of Departments (1), and (2)] pay and those whom the idle capitalists [namely the capitalists of Department (3)] pay; from these wage workers they [-capitalists from the three Departments-] recover the entire wages in this way [i.e., (2)  $c_2 + v_2 + s_2 = v_1 + v_2 + v_3$ ], except what little they may save;

(3) to the [mselves as] idle capitalist [s, or 'more exactly,' to themselves in the form of capitalists' consumption goods], whom they pay with a portion of their revenue which they have not spent for the wages of the laborers employed by them directly, so that the entire rent, which they pay [to] them [selves] annually, flows back to them [selves] in this way [i.e.,

(3)  $c_3 + v_3 + s_3 = s_1 + s_2 + s_3$ ].' (Destutt de Tracy, Traité de la volonté et de ses effets. Paris, 1821. Page 239.)"

(Marx, 1915, pp. 560, 561)

How would the aforementioned "equations" conform themselves when considered as a system, moreover according to von Bortkiewicz's algebraic interpretation of Comte Destutt de Tracy? Let us find out.

"And this is saying nothing about the fact that the assumption deals here only with a 'portion of their profits [-or their surplus

value—, or any supply of commodities representing profits —or surplus value—. But Destutt —and von Bortkiewicz— undertook precisely to tell us where these profits come from." (Marx, 1915, p. 561)

So after von Bortkiewicz has provided us with a most peculiar system of equations, (1), (2), and (3), he tells us in a belated example where those profits-or surplus value, come from. He has already enlightened us, as follows:

"If we now designate the rate of surplus value by  $r$ , then we have

$$r = \frac{s_1}{v_1} = \frac{s_2}{v_2} = \frac{s_3}{v_3}$$

and equations (1), (2), and (3) can be rewritten as follows:

$$(4) \quad c_1 + (1+r)v_1 = c_1 + c_2 + c_3$$

$$(5) \quad c_2 + (1+r)v_2 = v_1 + v_2 + v_3$$

$$(6) \quad c_3 + (1+r)v_3 = s_1 + s_2 + s_3$$

"

(von Bortkiewicz, 1949, p. 200)

First, let us consider "equations" (4) and (6) together.

"It seems that the quantity of commodities, in which the profit —or the surplus value— is incorporated, is produced by the circumstance that the capitalists do not only sell these commodities to one another (an assumption which is quite fine and profound), but also mutually sell them too dearly. Thus we are acquainted with the secret of the wealth of the capitalists", <sup>3/</sup> as exemplified by "equations" (4) and (6) which are to correspond to (1) and (3), as far as we are told by von Bortkiewicz.

In other words, the capitalists enrich themselves in the first place by deceiving each other in the circulation of their portion of their surplus value (or of their profits), which they set apart for their individual consumption, hence (6).

Furthermore, by deceiving each other in the circulation of their portion of surplus value (or of their portion of profits) which they relinquish as "capitalists' consumption goods" and which they devote to "where means of production are produced", i.e. (4).

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<sup>3</sup> Marx, 1915, p. 561.



For instance, if the capital advanced by capitalists of Department I is  $\lfloor c_1 + v_1 \rfloor$  sterling pounds, and correspondingly by capitalists of Department III,  $\lfloor c_3 + v_3 \rfloor$  sterling pounds, these sums of  $\lfloor c_1 + v_1 \rfloor$  sterling pounds and  $\lfloor c_3 + v_3 \rfloor$  sterling pounds are supposed to grow to  $\lfloor c_1 + v_1 + s_1 \rfloor$  sterling pounds and to  $\lfloor c_3 + v_3 + s_3 \rfloor$  sterling pounds by each stockholder of both Departments I and III selling his share to one another "r" per cent in excess;

"But if all do the same, the result will be just what it would have been if they had mutually sold their shares at their normal values. They merely need in that case  $\lfloor (c_1 + c_2 + c_3) + (s_1 + s_2 + s_3) \rfloor$  pounds sterling in money for the circulation of commodities valued at  $\lfloor (c_1 + v_1) + (c_3 + v_3) \rfloor$  pounds sterling, and this would seem to be rather a method of impoverishing than of enriching themselves, since it means that they are compelled to reserve a large portion of their total wealth unproductively in the state of medium of circulation. The outcome is simply that the capitalist class can divide only  $\lfloor (c_1 + v_1) + (c_3 + v_3) \rfloor$  pounds sterling's worth of commodities among themselves for their individual consumption, after nominally raising prices all around  $\lfloor$  or after nominally raising values all around  $\rfloor$ , but that they do one another the favor of circulating  $\lfloor (c_1 + v_1) + (c_3 + v_3) \rfloor$  pounds sterling's worth of commodities by means of a quantity of money which would just as well circulate  $\lfloor (c_1 + v_1 + s_1) + (c_3 + v_3 + s_3) \rfloor$  pounds sterling's worth of commodities." (Marx, 1915, p. 561)

Moreover,

"It is hard to understand how that can make the capitalists any richer." (Marx, 1915, p. 562)

Second, let us consider again the following "equation"

$$(2) \quad c_2 + v_2 + s_2 = v_1 + v_2 + v_3$$

Von Bortkiewicz, alongside

"Destutt himself is not quite satisfied with his solution. He did not tell us that the capitalists get richer by spending a sum of  $\lfloor v_1 + v_2 + v_3 \rfloor$  pounds sterling in money and then recovering the same amount. He had not plainly spoken of a reflux of  $\lfloor v_1 + v_2 + v_3 \rfloor$

pounds sterling which merely explains why this money is not lost. He had told us that the capitalists get richer 'by selling everything which they produce for more than it has cost to produce.'" (Marx, 1915, p. 563)

Hence, "equation" (5), which according to von Bortkiewicz corresponds to "equation" (2), rewritten.

Therefore,

"If the capitalists pay the laborers  $\lfloor v_1 + v_2 + v_3 \rfloor$  pounds sterling in wages, and supply them in exchange for  $\lfloor v_1 + v_2 + v_3 \rfloor$  pounds sterling only with  $\lfloor c_2 + v_2 \rfloor$  pounds sterling's worth of commodities, then they pay  $\lfloor v_3 / (v_1 + v_2) \rfloor$  per cent above the normal scale in wages and supply on the other hand  $\lfloor s_2 / (c_2 + v_2) \rfloor$  per cent less in commodities." (Marx, 1915, p. 564)

Let us consider the three equations as a whole.

"In other words, the fund from which the capitalist class would derive its profits, would be made up of deductions from the normal scale of wages of the laborers, by paying less than its value for labor-power, in other words, less than the value of the necessities of life required for the normal reproduction of the laborer. If the normal scale of wages were paid, which is supposed to be the case according to Destutt, there can be no fund for profits, neither for the industrial nor for the idle capitalists  $\lfloor$  i.e. "means of production are produced" and "capitalists' consumption goods", in von Bortkiewicz's parlance  $\rfloor$ .

Hence Destutt  $\lfloor$  and von Bortkiewicz himself  $\rfloor$  should have reduced the entire secret of how the capitalist class get richer, to these words: A deduction from the wages of the laborers. In that case the other sources of surplus-value, which he  $\lfloor$  including von Bortkiewicz et al.  $\rfloor$  mentions under (1) and (3), would not exist.

Under these conditions all the countries, in which the money paid to the laborers in wages is reduced to the value of the articles of consumption required for the subsistence of the working class, would not have any fund for the consumption of the capitalists, nor any fund for the accumulation of capital. In other words, there would be no fund permitting a capitalist class to live, and therefore no capitalist class. And according

to Destutt this would be the case in all wealthy and developed countries with an old civilization, for in them, 'in our deep-rooted old societies, the fund from which wages are paid \* \* \*

\* is an almost constant magnitude' (page 202)."

(Marx, 1915, p. 564) 4/

In a succinct form, from

$$(1) \quad c_1 + v_1 + s_1 = c_1 + c_2 + c_3$$

$$(2) \quad c_2 + v_2 + s_2 = v_1 + v_2 + v_3$$

$$(3) \quad c_3 + v_3 + s_3 = s_1 + s_2 + s_3$$

"Equations" (1), (2), and (3) can be rewritten as follows:

$$(4) \quad c_1 + (1+r)v_1 = c_1 + c_2 + c_3$$

$$(5) \quad c_2 + (1+r)v_2 = v_1 + v_2 + v_3$$

$$(6) \quad c_3 + (1+r)v_3 = s_1 + s_2 + s_3$$

Von Bortkiewicz is telling us that the capitalists of the three Departments obtain their surplus value by adding a markup to the  $\angle v_1 + v_2 + v_3 \angle$  sterling pounds laid out in the form of wages. But since all the capitalists are to engage in the same makeshift, it looks as if far from enriching themselves, they have indulged themselves in the useless frolic of circulating a commodity value of  $\angle (c_1 + v_1) + (c_2 + v_2) + (c_3 + v_3) \angle$  sterling pounds by means of a mass of money that could distribute commodities for the value of  $\angle (c_1 + v_1 + s_1) + (c_2 + v_2 + s_2) + (c_3 + v_3 + s_3) \angle$  sterling pounds.

For anybody endowed with the most plain, the most elementary commonsense, it would be obvious that the value of  $\angle (c_1 + v_1) + (c_2 + v_2) + (c_3 + v_3) \angle$  sterling pounds in the form of commodities would remain at  $\angle (c_1 + v_1) + (c_2 + v_2) + (c_3 + v_3) \angle$  sterling pounds. Meanwhile, the surplus value funds in the three

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<sup>4</sup> "The famous mystery of the constant relative shares of wages and profits in the product of industry does not now seem particularly mysterious. Trade Unions, backed by social legislation, oppose a countervailing power to monopoly that keeps the balance of forces fairly even. Neither party can succeed in increasing its relative share appreciably, while more-or-less neutral technical progress makes a more-or-less constant rate of exploitation compatible with a more-or-less constant rate of profit over the long run."

(Robinson, 1974, p. xvii)

Departments would cease to exist. Therefore, the Department (III) which von Bortkiewicz lables as "capitalists' consumption goods" would vanish.

And still von Bortkiewicz has not told us how the capitalists enrich themselves, while he has provided a most lucid hint on how they can impoverish themselves at an 'optimum' rate, i.e. keeping his proportionality upright.

In order to complete his advice, he has spoken to us of Value-calculation. Hence (I), (2) and (3); (4), (5), and (6) above, of which he discovers that

"The problem now is to convert these value expressions into price expressions which conform to the law of the equal rate of profit",<sup>5/</sup> as we have already seen, alongside a further finding of his:

"The counterpart of equations (4), (5), and (6) is now the following system:

$$(II) \quad (I+\rho)(c_1x + v_1y) = (c_1 + c_2 + c_3)x$$

$$(I2) \quad (I+\rho)(c_2x + v_2y) = (v_1 + v_2 + v_3)y$$

$$(I3) \quad (I+\rho)(c_3x + v_3y) = (s_1 + s_2 + s_3)z$$

(von Bortkiewicz, 1949, p. 202)

But this is not really correct. The counterpart of "equations" (4), (5), and (6) would be, at any time, as follows:

$$(4)bis \quad c_1x + (I+r)v_1y = (c_1 + c_2 + c_3)x$$

$$(5)bis \quad c_2x + (I+r)v_2y = (v_1 + v_2 + v_3)y$$

$$(6)bis \quad c_3x + (I+r)v_3y = (s_1 + s_2 + s_3)z$$

a modified form of Value-calculation.

Likewise, the counterpart of "equations" (II), (I2), and (I3) would be, at any time, as follows:

$$(II)bis \quad (I+\rho)(c_1 + v_1) = c_1 + c_2 + c_3$$

$$(I2)bis \quad (I+\rho)(c_2 + v_2) = v_1 + v_2 + v_3$$

$$(I3)bis \quad (I+\rho)(c_3 + v_3) = s_1 + s_2 + s_3$$

a simplified form of Price-calculation.

It is evident that von Bortkiewicz is simply displaying a  
5 (von Bortkiewicz, 1949, p. 201)



manipulation of Price calculation in (II), (I2), and (I3) on the basis of implicit (II)bis, (I2)bis, and (I3)bis. And not a conversion of Value-calculation -already abandoned- into Price-calculation, as he claims.

Let us follow him as closely and as simply as we can.

He is informing us that the capitalists of Departments I, II, and III obtain their profits by adding a markup to their commodities as a whole, for the amount of "Q," i.e.,  $(I+Q)$  multiplied by  $(c_1 + v_1)$ ;  $(c_2 + v_2)$ ;  $(c_3 + v_3)$  sterling pounds respectively. But he is also informing us that all the capitalists engage in the same upmarking, exposing that while this might be an exercise of mutual deception in circulation, it is not a source of enrichment.

The only result of this makeshift is that while the value of commodities expressed -as everybody knows even if he does not know anything else- in  $\lceil (c_1 + v_1) + (c_2 + v_2) + (c_3 + v_3) \rceil$  sterling pounds, would need to be circulated by a sum of money equal to  $\lceil (c_1 + v_1 + s_1) + (c_2 + v_2 + s_2) + (c_3 + v_3 + s_3) \rceil$  sterling pounds.

Meanwhile, the result would be that the capitalist class would have to disimburse continuously  $\lceil s_1 / (c_1 + v_1) \rceil$  per cent,  $\lceil s_2 / (c_2 + v_2) \rceil$  per cent,  $\lceil s_3 / (c_3 + v_3) \rceil$  per cent over and above the value of the commodity product that it is to circulate. This looks a fairly exotic way of the former enriching itself.

All that would happen is that the capitalist class would maintain idle a sum of money in the form of means of circulation, corresponding to the markup for the amount in which the commodities had been marked up.

Furthermore, the capitalist consumption fund would cease to exist, alongside the surplus funds of the first two departments mentioned by von Bortkiewicz.

By following von Bortkiewicz's forgotten Value-calculation, we would simply arrive to the same blind alley, in a parallel fashion to Price-calculation.

As we can see, von Bortkiewicz has had the ability to repeat twice the deep and meaningful teachings of Comte Destutt de Tracy, using, on appearance only, an extra principle.

Further to this, von Bortkiewicz has provided distinct means by which the capitalist class can impoverish itself, as he proceeds with the blunder of trying to find the "optimum" rate at

which the capitalist class can become poorer both by means of proportionality and by always keeping a double accounting.

But at this stage, we relinquish any further consideration of von Bortkiewicz's "equations," as we turn to the answer Marx gives to Destutt,<sup>6/</sup> vindicated by von Bortkiewicz and tutti quanti:

"This brilliant analysis is quite worthy of that depth of thought which copies on the one hand from Adam Smith that 'labor is the source of all wealth' (page 242), that the industrial capitalists 'employ their capital for the payment of labor that reproduces it with a profit' (page 246), and which concludes on the other hand that these industrial capitalists 'maintain all the other people, are the only ones who increase the public wealth, and create all the means for our enjoyment' (page 242), that it is not the capitalists who are maintained by the laborers, but the laborers who are maintained by the capitalists, for the brilliant reason that the money, with which the laborers are paid, does not remain in their hands, but continually returns to the capitalists in payment of the commodities produced by the laborers. 'They receive only with one hand, and return with the other. Their consumption must therefore be regarded as being due to those who pay their wages.' (Page 235).

After this exhaustive analysis of social reproduction and consumption, as promoted by the circulation of money, Destutt continues: 'This is what perfects this perpetuum mobile of wealth, this movement which, though ill understood' (mal connu, I should say so!) 'yet has justly been named circulation. For it is indeed a circulation and always returns to its point of departure. This is the point where production is accomplished.' (Pages 139, 140.)

Destutt, that very distinguished writer, membre de l'Institut de France et de la Société Philosophique de Philadelphie, and indeed to a certain extent a beacon light among the vulgar economists, finally requests his readers to admire the wonderful lucidity with which he has presented to them the course of the social process, the flood of light which he has poured over the matter, and he is condescending enough to communicate to his

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6 (Marx, 1915, pp. 569, 570)

readers, where all this light comes from. This must be read in the original in order to be appreciated.

'On remarquera, j'espère, combien cette manière de considérer la consommation de nos richesses est concordante avec tout ce que nous avons dit à propos de leur production et de leur distribution, et en même temps quelle clarté elle repand sur toute la marche de la société. D'où viennent cet accord et cette lucidité? De ce que nous avons rencontré la vérité. Cela rappelle l'effet de ces miroirs où les objets se peignent nettement et dans leurs justes proportions, quand on est placé dans leur vrai point-de-vue, et où tout paraît confus et désuni, quand on est trop près ou trop loin.' (Pp. 242 and 243.)

Voilà le crétinisme bourgeois dans toute sa béatitude!\*

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\* (It will be noted, I hope, how much this manner of viewing the consummation of our wealth is in accord with all we have said concerning its production and distribution, and also how much light it throws on the entire course of society. Whence come this accord and this lucidity? It is due to the fact that we have met truth face to face. This recalls the effect of those mirrors, in which the objects are reflected clearly and in their true proportions, when we are placed in their correct focus, but in which everything appears confused and distorted, when we are too close or too far away from them).

There you have the bourgeois idiocy in all its beatitude!"

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